Circular No. 761

Distribution of the Varieties and Classes of Wheat in the United States in 1944

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CONTENTS

HISTORY OF VARIETAL DISTRIBUTION

Wheat varieties grown in the United States are continually changing because of the development and distribution of improved strains by State and Federal agricultural experiment stations and by private breeders. This is especially true in the Middle West where wheat is a very important crop and growers are alert to the need for growing the newest and best varieties. In the older wheat-growing regions of the United States some varieties now grown have been in cultivation for more than a hundred years, but these are gradually being replaced by newer and superior types. Varietal surveys furnish a historical record of this shifting of varieties, and, in addition, they form a basis for further wheat improvement. For these reasons a wheat varietal

[1] The writers wish to express their appreciation to the agricultural statisticians of the field offices of the Division of Agricultural Statistics of the Bureau of Agricultural Economics, who participated in collecting the basic information for their report; and to Joseph A. Becker, formerly principal agricultural statistician, Richard K. Smith, principal agricultural statistician, and Julius H. Peters, senior agricultural statistician, Bureau of Agricultural Economics, for cooperation in preparing and compiling the questionnaires. The maps were made in the graphic section of the Bureau of Agricultural Economics.

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survey has been made by the United States Department of Agriculture at 5-year intervals since 1919.[2]

This circular presents the estimated acreages as determined from the sixth survey, that for the crop year 1944. The estimated acreages by varieties and classes were computed from the seeded acreages of wheat, by counties, as estimated by the Bureau of Agricultural Economics. This is the second time that seeded acreages have been available and used. The earlier reports were based upon harvested acreages as reported by the regular and special agricultural census except in 1934, when seeded wheat acreages, as estimated by the Bureau of Agricultural Economics, were used for some of the important wheat-producing States where abandonment was heavy because of drought. Seeded acreage figures were used entirely for the 1939 and 1944 surveys.

The 1939 wheat acreages used in this circular (used also in Circular No. 634) are the preliminary estimates of the Crop Reporting Board, as prepared in December 1939 for States and in 1940 for counties. They differ somewhat from the Crop Reporting Board's revised State and county estimates that were prepared after the 1940 Federal Census enumeration of 1939 acreage became available. The 1944 acreages here used likewise are the preliminary estimates prepared in December 1944 and will be superseded by the Board's later revisions.

Varietal-Survey Methods

The survey methods were the same as reported for 1939. Questionnaires were sent from the State offices of the Bureau of Agricultural Economics to crop correspondents of the United States Department of Agriculture and also to the agronomy department of some of the State agricultural experiment stations for distribution. The correspondents were requested to name the varieties of wheat grown in their locality and to estimate the percentage of the total acreage occupied by each. They also were asked to show the varieties and acreages of each grown on their own farms. These questionnaires were sent to reporters in all States for which the Bureau of Agricultural Economics estimated wheat acreages in 1944. Approximately 75,000 questionnaires were sent out.

About 12,000 schedules were returned. This was a rather low percentage, due in part to the rush of farm work and to an extreme shortage of labor. These returns were sorted and those containing usable information were compiled and the data assembled so as to combine the acreages for varieties with synonymous names. Insofar as possible,

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[2] Clark, J. A., Martin, J. H., and Ball, C. R. classification of american wheat varieties. U. S. Dept. Agr. Dept. Bul. 1074, 238 pp., illus. 1922.

——— Martin, J. H., Quisenberry, K. S., and others. distribution of the classes and varieties of wheat in the united states. U. S. Dept. Agr. Dept. Bul. 1498, 68 pp., illus. 1929.

——— and Quisenberry, K. S. distribution of the varieties and classes of wheat in the united states in 1929. U. S. Dept. Agr. Cir. 283, 75 pp., illus. 1933.

——— and Quisenberry, K. S. distribution of the varieties and classes of wheat in the united states in 1934. U. S. Dept. Agr. Cir. 424, 68 pp., illus. 1937.

——— and Quisenberry, K. S. distribution of the varieties and classes of wheat in the united states in 1939. U. S. Dept. Agr. Cir. 634, 75 pp., illus. 1942.

the identity of misnamed varieties was determined, partly by the description of varieties as supplied by the correspondents and partly by local names, the synonymy of which had been determined previously. In some cases, seed or head samples and additional information were requested in an attempt to identify new names more accurately. Of the reports returned, 10,636 were usable, or about 600 less than in 1939. In reviewing the usable questionnaires of this survey it was felt that the reporters were becoming more "variety conscious" and that the information given, although not perfect, was more accurate than in the previous surveys. This probably is due, in part at least, to more emphasis being placed on varieties by growers, experiment stations, extension workers, farm papers, and the grain trade throughout the country.

Acreage percentages for each variety as reported by the correspondents from each county were averaged, and the county acreage as reported by the Bureau of Agricultural Economics was then broken down according to these average percentages. The result gave the estimated acreage for each variety by counties. These county figures were used as the basis for determining the total acreage of varieties for each crop-reporting district and State and for the United States. All varieties in each commercial class were then totaled for each district and State and for the United States.

Reports were not received from all counties in which wheat was reported as being grown. In order to make the data more complete, estimates were made by the writers for all such counties based on information for the same counties from previous surveys, from reports from adjacent counties, and the writers' personal knowledge. Some correspondents failed to report varieties totaling 100 percent of the acreage of their community, or they simply listed a certain percentage of "other varieties." Some reports contained varieties under local names that could not be identified. Owing to these discrepancies the acreage of wheat not accounted for by varieties is listed in the tables as "Others and not reported." The reported acreages of the varieties of durum and club wheats are somewhat incomplete, because these varieties were listed by many of the correspondents simply as "durum" or "club." Therefore, the varietal acreage is not complete for these groups of wheat.

Maps were made showing the distribution of the acreage of all wheat and also of the different market classes and the important varieties, the seeded county acreages being used as the basis.

In this survey the varietal names used are the ones recognized in Technical Bulletin 795 [3] and in the annual reports on varietal registration issued through a cooperative agreement between the Bureau of Plant Industry, Soils, and Agricultural Engineering and the American Society of Agronomy.

In 1919, 1924, 1929, 1934, 1939, and 1944, respectively, 139, 152, 190, 213, 208, and 217 distinct varieties were reported. In 1944, 36 new varieties were reported for the first time, and 7 that were not reported in 1939 but had been grown in previous years were again

[3] CLARK, J. A., and BAYLES, B. B. CLASSIFICATION OF WHEAT VARIETIES GROWN IN THE UNITED STATES. U. S. Dept. Agr. Tech. Bul. 795, 146 pp., illus. 1942.

reported. A total of 34 varieties that were reported in 1939 were not reported again. A few other newly named varieties, which were known to have been grown in experiments and on small commercial acreages, were not shown in the survey. All varieties having no reported acreage in either 1939 or 1944 were dropped from the tables.

WHEAT ACREAGE OF THE UNITED STATES

The total seeded acreage of wheat in the United States in 1944 was slightly more than 65½ million, which is approximately 1¾ million acres larger than the 1939 seeded acreage. The 1944 seeded acreage is considerably larger than the acreage used in any of the earlier reports, except that for 1919, for which earlier years the harvested acreage was used. The distribution of the total seeded wheat acreage for the United States in 1944 is shown in figure 1.

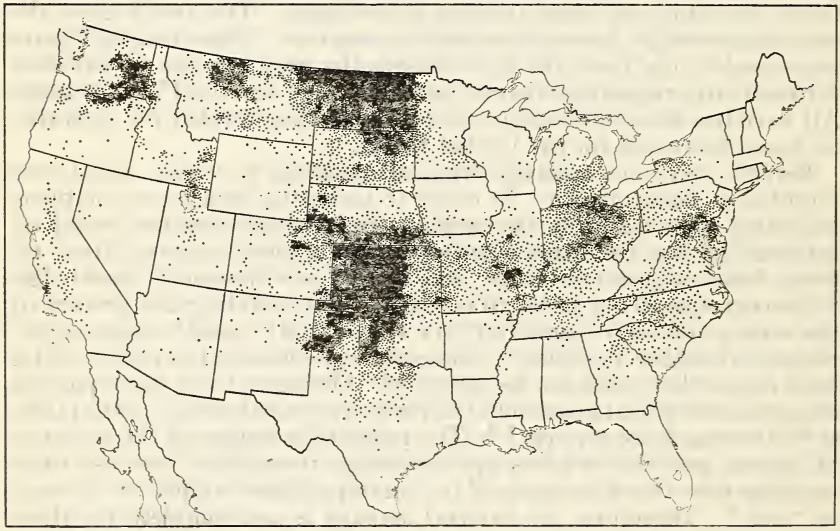

FIGURE 1.—Distribution of the total wheat acreage seeded in the United States in 1944. Each dot represents 5,000 acres. Estimated area, 65,684,000 acres.

The acreage figures used for the 1944 crop show some shifts in certain States as compared to 1939. Decided increases were reported in North Dakota, Washington, Texas, Oklahoma, South Dakota, North Carolina, Montana, and Oregon, while smaller increases were shown in Michigan, Tennessee, New York, Kentucky, and Georgia. In a number of the States decreases in acreages were reported, some of the larger ones being Kansas, Illinois, Indiana, Minnesota, Iowa, Nebraska, Missouri, and California. Smaller decreases were shown in Wyoming, Idaho, Colorado, West Virginia, and Wisconsin. These acreage shifts may have been caused partly by seasonal variation and partly by readjustments following control programs.

Estimated Acreage of Varieties

The estimated acreage in 1944 and 1939 and the percentage of the total wheat acreage occupied by each variety at 5–year intervals starting in 1919 are shown by States in table 1. In this table the classes and varieties are arranged in order of their 1944 acreage. Varieties reported in previous surveys but not reported in either 1944 or 1939 are not listed, but the percentage of the acreage occupied by them is included with "Others and not reported." The acreages in "Others and not reported" were distributed among the classes also.

Table 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*

[Figures in parentheses opposite the name of each State, under "Acreage," show the number of reports used in computing the data for each survey. The asterisk (*) indicates a variety reported as grown, but an estimate of acreage either was not given or if given was less than 0.1 percent of the total acreage of the State. The item "Others and not reported" is included in the total for classes]

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Alabama:							(23)	(67)
Soft red winter			100.0	100.0	100.0	100.0	7,000	18,000
Purplestraw	54.4	43.0	50.1	89.9	77.5	80.3	5,425	14,459
Sanford						9.8		1,771
Flint	.6			7.1	12.2	4.1	855	729
Leap						3.5		632
Fulcaster	16.8	9.3	6.8		3.4	.2	240	36
Redhart						.1		18
Grandprize					.9		60	
Others and not reported	28.2	47.7	43.1	3.0	6.0	2.0	420	355
Total							7,000	18,000
Arizona:							(41)	(33)
White			96.9	97.6	95.7	78.4	33,486	20,381
Baart	55.3	18.6	79.8	85.4	83.2	57.9	29,115	15,054
Baart 38						14.6		3,811
Sonora	15.7	42.7	8.1	9.0	1.9	4.4	668	1,151
White Federation					6.4	1.3	2,250	333
Club (varieties not reported)	17.3	27.0	5.6	2.1	1.6	.1	570	17
Pacific Bluestem	1.7	.2	1.2	.4		.1		15
Defiance	1.1	1.5		.5	.9		315	
Hard red winter			2.1	.8	.5	21.1	173	5,496
Turkey	1.7	.3	1.6	.8	.5	18.3	165	4,769
Tenmarq						2.8		727
Hard red spring			.7	1.5	3.0	.5	1,053	123
Marquis	.8	3.1	.5	1.5	2.7	.5	927	123
Hope					.2		80	
Durum			.3	.1	.8		288	
Durum (varieties not reported)	.6	.1	.3	.1	.8		275	
Others and not reported	5.8	6.5	2.9	.2	1.8		635	
Total							35,000	26,000
Arkansas:							(65)	(50)
Soft red winter			100.0	90.4	96.4	97.8	47,225	63,539
Red May	24.9	6.0	5.2	26.8	21.0	44.7	10,278	29,017
Fulcaster	11.9	27.8	24.5	13.6	31.5	21.6	15,449	14,019
Mediterranean	9.4	21.6	30.6	10.5	16.0	20.4	7,855	13,281
Purplestraw	8.4	6.4	4.6	5.3	9.3	7.9	4,552	5,111
Kawvale					2.3	1.4	1,125	928
Redhart						1.0		658
Early Premium						.7		465
Flint					.7	.1	337	60
Fultz	14.5	5.0	17.5	9.5	6.2		3,010	
Currell	1.1	.1	9.5	8.4	6.0		2,914	
Rice					1.6		799	
Hard red winter				9.6	3.6	2.2	1,775	1,461
Turkey	5.6	5.2		7.4	3.5	2.2	1,735	1,461
Others and not reported	24.2	27.9	8.1	18.5	1.9		946	
Total							49,000	65,000

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
California:							(224)	(196)
White			98.8	99.4	99.8	99.5	723,077	592,990
White Federation 38						33.1		197,409
Baart 38						27.3		162,746
Bunyip	(*)	8.2	16.9	11.4	13.0	8.2	94,448	49,103
Onas			2.6	4.6	5.2	6.2	37,876	36,974
Big Club	(*)	.2	.1	5.5	4.7	4.0	34,159	23,792
Baart	10.7	32.1	24.8	27.6	26.6	3.8	193,029	22,584
White Federation		.4	5.9	17.1	29.4	3.8	212,883	22,574
Ramona				.1	1.2	2.3	8,682	13,735
Federation		(*)	3.7	9.3	1.6	2.2	11,729	12,826
Pacific Bluestem 37					.2	2.1	1,327	12,628
Galgalos	1.6	.8	.7	1.1	1.9	1.7	13,547	10,394
Pacific Bluestem	40.4	13.8	14.4	7.1	5.5	1.7	39,454	9,852
Poso				.3	3.2	1.2	23,126	7,348
Florence		(*)	.2	.5	.2	.6	1,739	3,592
Sonora	17.5	11.9	10.7	5.5	2.2	.5	16,182	3,103
Escondido			.3	2.5	2.2	.2	15,925	1,107
Pilcraw				.5	.4	.1	2,886	627
White Winter	.2	.1	(*)	(*)	.1	.1	876	519
Rex						.1		496
Club (varieties not reported)	10.3	16.7	8.0		.3	.1	2,460	465
Hard Federation		.4	2.3	(*)	.8	.1	5,395	280
Propo	1.8	2.5	2.9	.4	.1		392	
Sonora 37					(*)		241	
Lynn	.9			.4	(*)		115	
Hard red winter			.5	.6	.2	.5	1,827	3,010
Kanred			.1	.3	.1	.3	714	1,688
Turkey	.7	.8	.4	.3	.2	.2	1,111	1,320
Durum				(*)	(*)		96	
Durum (varieties not reported)	.1	(*)		(*)	(*)		95	
Others and not reported	15.8	12.1	6.0	5.5	.9	.1	6,609	838
Total							725,000	596,000
Colorado:							(254)	(163)
Hard red winter			75.0	79.2	79.5	88.3	1,321,976	1,419,538
Turkey	66.5	51.0	51.4	53.5	44.2	26.8	735,187	430,806
Tenmarq					2.8	22.6	45,767	383,100
Blackhull		.3	1.8	5.8	9.1	17.2	152,098	276,500
Kanred		23.5	17.5	14.4	19.4	13.7	322,174	219,570
Cheyenne					2.7	4.4	44,231	71,208
Chiefkan					(*)	3.1	154	50,088
Nebred						.2		3,260
Red Chief						.2		2,920
Early Blackhull						.1		1,272
Nebraska No. 60			1.1	1.0	.9	.1	15,054	814
Alton			1.0		(*)		121	
Hard red spring			19.8	17.3	18.7	11.2	311,780	179,323
Marquis	9.4	13.9	17.0	12.7	7.5	4.3	124,712	69,494
Ceres				3.0	5.1	3.1	85,509	50,065
Thatcher					.7	2.8	11,539	45,584
Komar				.1	4.2	.7	69,640	11,977
Reward						.1		1,806
Kitchener		.1	.2	.2	.2	(*)	2,671	275
Red Bobs		(*)	.1	(*)	.1	(*)	2,127	122
Kota			.2	(*)	.4		7,217	
Sea Island			.4	(*)	.4		6,680	
White			2.6	2.6	1.3	.5	21,051	8,677
Defiance	9.3	1.7	1.8	1.8	.4	.2	7,153	3,092
Dicklow			.1	.2	.1	.2	1,752	2,780
Baart	(*)		.1	.2	.7	.2	10,944	2,734
Surprise	.1		.2	.1	.1	(*)	1,048	71
Soft red winter			.5	.1	.3	(*)	4,315	462
Jones Fife	.3	.2	.1	.1	.3	(*)	4,293	462
Durum and red durum			2.1	.8	.2		3,878	
Durum (varieties not reported)	11.1	5.4	2.0	.8	.2		3,857	
Others and not reported	3.3	3.9	5.0	6.1	.5		9,072	
Total							1,663,000	1,608,000

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Delaware:							(23)	(8)
Soft red winter	------	------	100.0	99.1	100.0	100.0	75,000	68,000
Nittany	------	0.8	27.0	41.1	45.4	53.0	34,007	36,020
Leap	10.1	20.1	34.7	17.9	39.5	28.6	29,614	19,482
Fulcaster	15.0	63.7	19.1	24.7	5.8	7.2	4,349	4,875
V. P. I. 131	------	------	------	------	------	4.9	------	3,363
Fultz	11.2	1.7	4.4	.6	2.4	------	1,831	----------
Mammoth Red	------	------	4.4	2.3	1.4	------	1,079	----------
Diehl-Mediterranean	------	------	------	------	1.1	------	850	----------
Forward	------	------	2.9	1.2	.5	------	360	----------
Others and not reported	63.7	13.7	7.5	12.2	3.9	6.3	2,910	4,260
Total	------	------	------	------	------	------	75,000	68,000
Georgia:							(174)	(166)
Soft red winter	------	------	100.0	100.0	100.0	100.0	196,000	243,000
Purplestraw	54.2	69.2	83.4	77.0	71.9	49.4	140,824	120,196
Redhart	------	------	------	3.9	21.3	33.1	41,833	80,423
Sanford	------	------	------	------	------	12.9	------	31,339
Hardired	------	------	------	------	------	1.9	------	4,776
Fulcaster	12.4	7.1	3.2	3.7	1.3	1.8	2,598	4,404
Gasta	------	------	------	.6	1.7	.5	3,278	1,123
Leap	1.6	1.7	2.6	.1	------	.2	------	473
Flint	(*)	2.2	.5	5.9	2.5	.1	4,930	114
Fultz	1.5	.9	1.1	2.4	.3	------	605	----------
Mediterranean	.4	1.1	.6	------	(*)	------	41	----------
Others and not reported	29.9	17.8	8.6	6.4	1.0	.1	1,891	152
Total	------	------	------	------	------	------	196,000	243,000
Idaho:							(387)	(286)
White	------	------	61.3	60.2	54.9	56.1	527,652	592,869
Federation	------	2.1	16.3	18.2	16.8	10.6	161,625	112,213
Lemhi	------	------	------	------	(*)	10.2	185	107,493
Rex	------	------	------	------	4.6	7.4	44,490	78,210
Goldcoin	8.1	8.4	8.7	3.6	3.9	7.4	37,908	77,717
Baart	1.3	11.1	8.6	7.1	6.9	7.1	66,286	74,642
Dicklow	14.0	10.6	14.7	14.8	10.4	5.2	99,797	55,148
Idaed	------	------	------	------	.1	3.8	638	40,336
Hymar	------	------	------	------	.8	1.6	7,486	16,739
Golden	------	------	------	------	.9	1.2	9,014	12,250
Pacific Bluestem	12.4	6.8	3.3	1.5	.8	.3	7,992	3,097
Florence	------	.1	1.1	.2	.4	.2	4,225	2,585
Albit	------	------	.2	8.4	6.2	.2	59,048	2,084
Jenkin	1.9	4.3	2.8	1.6	.8	.2	7,438	1,915
Little Club	2.2	.8	.1	.1	------	.2	------	1,644
Hard Federation	------	.1	.2	.1	.1	.2	595	1,624
Sonora	2.0	1.2	.2	.4	.1	.1	441	1,387
Hybrid 128	.2	.4	2.0	(*)	.1	.1	488	1,313
White Federation	------	------	------	------	.1	(*)	1,375	710
Club (varieties not reported)	3.9	2.5	1.3	.6	.5	(*)	4,468	559
Wilhelmina	------	------	------	1.3	.3	(*)	3,083	221
Gypsum	.8	.2	------	.2	.1	------	950	----------
Mackey	------	------	------	.5	.1	------	833	----------
Utac	------	------	------	------	.1	------	738	----------
Surprise	.5	1.3	------	.1	.1	------	716	----------
Defiance	1.3	.3	(*)	------	(*)	------	421	----------
Martin	.6	.1	.1	.3	(*)	------	198	----------
Canadian Red	------	------	------	------	(*)	------	167	----------
Big Club	1.1	.2	.1	.1	(*)	------	162	----------
Requa	------	------	------	------	(*)	------	147	----------
Powerclub	------	.6	.1	.2	(*)	------	59	----------
Hard red winter	------	------	26.4	30.5	36.7	37.5	352,462	395,712
Turkey	15.6	26.7	19.9	23.3	26.3	31.7	252,056	334,803
Ridit	------	------	2.8	4.3	5.2	3.1	49,818	32,722
Mosida	------	------	.9	1.2	1.6	1.6	15,087	16,457
Relief	------	------	------	------	.7	.6	6,495	6,272
Sherman	------	------	.1	.2	.3	.2	2,543	1,824
Kanred	------	.9	1.7	1.0	.4	.2	4,097	1,548
Oro	------	------	------	.1	.8	.1	8,094	839
Blackhull	------	------	(*)	.1	.4	.1	3,818	832
Tenmarq	------	------	------	------	------	(*)	------	83
Utah Kanred	------	------	------	------	.7	------	6,885	----------
Yogo	------	------	------	------	(*)	------	98	----------

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Idaho—Continued								
Hard red spring			7.5	5.8	6.4	5.1	61,214	53,926
Marquis	16.2	14.8	7.3	5.1	5.4	4.0	52,292	42,420
Komar					(*)	.6	(*)	6,587
Thatcher					(*)	.3	92	3,480
Garnet				(*)	.3	.1	2,821	712
Ceres					.3	(*)	2,500	428
Red Bobs		(*)	.1	.6	.3	(*)	2,813	220
Hope					(*)		42	
Reward					(*)		12	
Soft red winter			4.8	3.5	2.0	1.3	18,672	13,493
Red Russian	3.4	1.2	2.3	1.9	.4	.5	3,750	4,701
Triplet		2.3	.9	.4	.7	.4	6,770	4,266
Lofthouse	.3		.2	.2	.4	.3	4,022	3,093
Jones Fife	2.2	1.3	1.2	.6	.4	.1	3,798	1,403
Odessa	1.3	.1	.1	.3	(*)		82	
Others and not reported	10.7	1.6	2.7	1.4	1.2	.1	11,042	1,423
Total							960,000	1,056,000
Illinois:							(472)	(200)
Soft red winter			51.4	65.3	58.7	76.7	1,144,912	1,033,246
Fultz	24.2	23.0	19.8	25.9	18.2	19.2	355,476	258,830
Fulhio			3.1	10.0	18.8	16.8	365,846	226,687
Fulcaster	2.6	4.0	6.2	3.4	7.6	10.4	147,455	139,419
Thorne					(*)	4.9	281	65,617
Mediterranean	6.4	2.5	2.3	3.0	1.0	4.0	19,495	54,452
Kawvale					1.1	4.0	20,712	53,818
Russian Red	.6	.4	.3	.6		3.3		44,521
Clarkan					(*)	2.4	860	32,613
Red May	3.4	2.4	5.9	4.0	2.4	1.8	46,746	24,581
Fultzo-Mediterranean	1.2	.2	.4	.4	.1	1.7	1,789	23,399
Red Wave	3.5	4.6	3.1	4.1	1.8	1.3	35,622	17,812
Poole	2.8	2.5	2.4	1.7	.5	1.3	9,132	17,063
Wabash					(*)	1.2	449	15,854
Rudy	.4	.1	.1	.1	.2	1.1	3,109	14,845
Illinois No. 2				.1	.6	.9	11,511	12,147
Nigger	.7	.7	.5	.3	.6	.8	12,317	11,225
Trumbull		(*)	.5	.7	.2	.4	4,570	5,100
Goens						.3		3,975
Prosperity				(*)	.3	.2	5,381	2,909
Harvest Queen	2.3	2.5	.4	.2	.1	.1	2,188	906
Jones Fife	3.1	1.5	.8	.5	.6	(*)	10,801	512
Nabob				(*)	.2	(*)	3,792	412
Fairfield						(*)		355
Prairie						(*)		244
Red Rock	.1	(*)	(*)		(*)	(*)	413	188
Currell	.5	.1	.2	.1	.2		3,331	
Russian					.9		17,792	
Rice				(*)	.1		2,369	
Purdue No. 1					(*)		618	
Early Premium					(*)		404	
Shepherd			.2	(*)	(*)		238	
Hard red winter			45.6	33.9	39.9	22.0	777,818	296,916
Turkey	26.9	41.3	35.8	27.6	17.4	11.3	339,806	151,721
Purkof			1.7	5.2	8.5	2.6	165,795	35,092
Brill					.2	2.3	7,748	30,691
Cheyenne					2.4	1.7	42,474	22,566
Iobred			.4	.3	4.3	1.1	83,246	14,686
Minturki			.3	.3	.7	1.0	13,937	12,930
Michikof			2.4	1.4	2.9	.8	56,564	11,090
Kanred		4.7	2.2	1.2	.6	.5	11,556	6,809
Ilred		.4	1.1	.4	.2	.4	3,801	4,633
Wisconsin Pedigree No. 2				(*)	.5	.2	10,382	2,258
Tenmarq					(*)	.1	366	809
Iowin					(*)	(*)	332	480
Ukrainka				.1	.2	(*)	4,191	390
Blackhull		2.7	.3	.2	.1	(*)	984	265
Red Chief						(*)		232
White			.1			.7		8,812
Dawson						.7		8,755
Hard red spring			2.9	.8	1.4	.6	28,270	8,026
Thatcher					.1	.6	2,292	8,000
Progress			.1	.1	.9		16,952	
Marquis	11.3	1.1	1.6	.4	.2		3,887	
Preston	.6	.1	.3	.1	.1		2,369	

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Illinois—Continued								
Hard red spring—Continued								
Java	0.1	------	0.7	0.2	0.1	------	1,414	----------
Sturgeon	------	------	------	(*)	(*)	------	101	----------
Others and not reported	9.3	5.2	6.9	7.4	5.1	0.6	100,106	8,109
Total	------	------	------	------	------	------	1,951,000	1,347,000
Indiana:							(475)	(130)
Soft red winter	------	------	89.6	94.1	84.4	85.3	1,373,644	1,141,447
Fultz	14.7	16.9	17.2	22.3	21.0	26.4	341,575	352,767
Rudy	8.5	12.4	9.3	10.1	12.9	13.4	210,337	179,581
Trumbull	------	.5	2.9	4.9	9.6	11.1	155,881	147,869
Red May	5.3	8.4	15.4	17.4	12.1	7.2	197,556	96,146
Thorne	------	------	------	------	(*)	5.1	64	68,701
Poole	25.3	19.1	12.8	11.5	8.4	4.9	137,437	65,420
Fairfield	------	------	------	------	------	2.8	----------	36,939
Purdue No. 1	------	------	------	(*)	3.3	2.7	53,630	36,651
Wabash	------	------	------	------	(*)	2.3	200	30,952
Russian	------	------	------	------	------	1.6	----------	21,300
Red Wave	13.2	6.1	3.2	3.6	2.7	1.6	44,349	21,169
Red Rock	.5	.1	.7	.3	.3	1.5	4,112	20,070
Fulcaster	1.3	4.6	1.9	.8	.9	.4	13,958	4,755
Fulhio	------	------	------	.1	.4	.2	7,121	3,165
Wheedling	.4	.2	.1	.2	------	.1	----------	1,350
Currell	1.0	.6	.7	.4	------	.1	----------	1,220
Goens	2.2	3.3	.6	1.6	3.5	.1	56,879	590
Illinois No. 2	------	------	------	------	------	(*)	----------	525
Baldrock	------	------	------	------	.5	(*)	7,278	452
Nigger	3.6	2.9	3.3	2.3	2.2	(*)	35,335	350
Jones Fife	.9	.3	.8	.3	1.0	------	16,751	----------
Nittany	------	------	------	------	.1	------	2,231	----------
Mediterranean	2.3	3.0	.7	.3	.1	------	1,746	----------
Fultzo-Mediterranean	1.0	.2	.3	.1	.1	------	883	----------
Climax	(*)	.1	.2	.1	(*)	------	474	----------
Gladden	------	.1	(*)	------	(*)	------	233	----------
Hard red winter	------	------	10.1	5.9	15.1	14.6	246,070	195,419
Purkof	------	------	10.6	10.2	11.2	8.9	181,609	120,243
Turkey	4.6	8.0	3.2	1.9	.9	3.7	14,710	49,273
Michikof	------	3.3	5.7	3.4	1.9	1.4	31,671	18,332
Kanred	------	.5	.3	.1	.1	------	683	----------
Hard red spring	------	------	.1	(*)	.3	.1	4,084	1,107
Java	------	------	------	------	.2	.1	3,748	1,047
White	------	------	.2	------	.2	------	3,202	----------
Dawson	------	------	------	------	.2	------	2,929	----------
Others and not reported	15.2	9.4	10.1	8.1	6.4	4.4	103,620	59,133
Total	------	------	------	------	------	------	1,627,000	1,338,000
Iowa:							(211)	(187)
Hard red winter	------	------	89.1	91.8	89.9	95.7	401,829	153,070
Iowin	------	------	.2	2.4	21.2	50.3	94,785	80,504
Iobred	------	.1	18.0	25.5	27.9	25.4	124,795	40,679
Turkey	52.1	64.8	58.4	52.5	30.1	15.2	134,717	24,346
Ioturk	------	------	1.0	2.6	2.4	2.7	10,622	4,281
Kanred	------	16.6	9.2	8.3	3.5	1.4	15,454	2,298
Nebred	------	------	------	------	------	.2	----------	243
Blackhull	------	------	------	------	.9	.1	4,181	151
Minturki	------	.1	.2	------	.1	------	554	----------
Hard red spring	------	------	7.9	6.6	9.6	4.0	42,879	6,432
Thatcher	------	------	------	------	7.1	3.7	31,644	5,841
Ceres	------	------	.1	.1	------	.1	----------	159
Hope	------	------	------	.2	.7	.1	3,297	150
Pilot	------	------	------	------	------	.1	----------	100
Mercury	------	------	------	------	------	(*)	----------	70
Rival	------	------	------	------	------	(*)	----------	58
Marquis	28.0	6.4	5.0	5.0	1.0	(*)	4,394	18
Komar	------	------	------	.2	.4	------	1,805	----------
Marquillo	------	------	------	(*)	.1	------	278	----------
Preston	4.5	1.3	.9	.5	.1	------	217	----------
Java	.3	1.2	.5	.3	(*)	------	130	----------
Progress	------	------	------	------	(*)	------	90	----------
Soft red winter	------	------	2.4	.4	------	.1	----------	209
Kawvale	------	------	------	------	------	.1	----------	208
Durum	------	------	.4	.7	------	.1	----------	159
Pentad	------	------	------	.2	------	.1	----------	159

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Iowa—Continued								
White	------	------	0.2	0.5	0.5	0.1	2,292	130
Florence	------	------	.2	.5	.5	.1	2,265	130
Others and not reported	15.1	9.5	6.3	1.7	4.0	.4	17,772	605
Total	------	------	------	------	------	------	447,000	160,000
Kansas:							(1,288)	(1,718)
Hard red winter	------	------	94.4	94.2	91.1	94.0	12,657,222	12,318,202
Tenmarq	------	------	------	1.3	19.6	36.6	2,718,929	4,798,841
Blackhull	(*)	10.5	33.4	34.9	31.0	15.5	4,308,178	2,029,311
Turkey	82.3	61.6	48.0	44.3	28.9	14.7	4,018,469	1,922,832
Early Blackhull	------	------	(*)	.6	1.6	9.0	215,988	1,185,234
Chiefkan	------	------	------	------	2.8	8.6	382,431	1,132,498
Red Chief	------	------	------	------	------	4.4	----------	582,748
Kanred	.8	19.0	12.0	10.4	4.5	2.7	622,610	351,988
Cheyenne	------	------	------	(*)	.2	.8	21,916	103,361
Iobred	------	------	.2	.1	1.1	.6	146,129	72,469
Redhull	------	------	(*)	.3	.7	.1	95,591	13,902
Nebred	------	------	------	------	------	.1	----------	10,186
Nebraska No. 60	------	------	(*)	(*)	(*)	.1	632	9,120
Comanche	------	------	------	------	------	.1	----------	7,477
Triumph	------	------	------	------	------	.1	----------	6,360
Iowin	------	------	------	------	(*)	(*)	647	5,198
Kanhull	------	------	------	------	------	(*)	----------	1,165
Ukrainka	------	------	------	------	------	(*)	----------	950
Ioturk	------	------	------	------	(*)	(*)	3,633	505
Pawnee	------	------	------	------	------	(*)	----------	423
Eagle Chief	------	------	------	------	(*)	------	374	----------
Minturki	------	------	------	------	(*)	------	360	----------
Cooperatorka	------	------	------	.3	(*)	------	259	----------
Soft red winter	------	------	5.3	5.6	8.8	5.9	1,229,334	778,249
Kawvale	------	------	------	.3	6.4	4.4	882,789	573,726
Clarkan	------	------	------	------	.5	1.3	73,269	167,583
Fulcaster	1.0	.4	.6	.8	.5	.1	64,393	13,299
Jones Fife	------	------	.3	.2	(*)	.1	4,550	6,410
Currell	1.2	.7	1.0	1.0	.3	(*)	45,182	4,654
Fultz	3.0	.5	.6	.4	.2	(*)	23,123	1,680
Mediterranean	.7	.4	.1	.2	.3	(*)	39,943	1,647
Harvest Queen	4.5	1.8	1.9	1.5	.4	(*)	59,771	1,018
Red Wave	.1	(*)	.1	.1	(*)	(*)	2,258	287
Red Rock	------	(*)	.1	.1	(*)	------	8,703	----------
Nigger	.1	.2	.1	.2	(*)	------	6,240	----------
Red May	1.3	.4	.1	.3	(*)	------	4,093	----------
Kruse	------	------	------	(*)	(*)	------	390	----------
Gipsy	(*)	(*)	(*)	(*)	(*)	------	400	----------
Hard red spring	------	------	.2	.2	.1	.1	8,444	6,549
Thatcher	------	------	------	------	------	(*)	----------	3,639
Reward	------	------	------	------	------	(*)	----------	2,870
Marquis	(*)	------	.1	.2	(*)	------	2,700	----------
Komar	------	------	------	------	(*)	------	5,686	----------
Others and not reported	5.0	4.5	1.4	2.5	1.0	.7	135,364	91,619
Total	------	------	------	------	------	------	13,895,000	13,103,000
Kentucky:							(209)	(118)
Soft red winter	------	------	98.2	98.5	100.0	99.0	464,000	506,701
Fultz	33.6	23.1	41.5	41.4	45.1	40.6	209,209	207,970
Currell	8.3	8.7	10.0	10.0	15.8	18.8	73,423	96,117
Fulcaster	11.8	27.5	10.6	11.5	15.5	11.7	71,838	59,649
Thorne	------	------	------	------	------	9.1	----------	46,726
Poole	12.1	13.4	11.0	15.0	6.6	7.3	30,594	37,562
Mediterranean	6.0	6.6	6.8	5.4	4.0	3.3	18,782	17,039
Purplestraw	(*)	------	.3	1.0	------	1.9	----------	9,837
Ashland	------	1.3	4.3	.9	.1	1.0	396	5,384
Forward	------	------	------	------	------	1.0	----------	4,884
Leap	.2	.8	------	.4	.1	.9	688	4,733
Red May	1.9	1.4	.3	1.6	.4	.6	1,734	2,833
Kentucky R 47	------	------	------	------	------	.5	----------	2,570
Flint	------	------	------	------	------	.5	----------	2,450
Trumbull	------	(*)	.7	1.1	.7	.4	3,071	2,004
Nittany	------	------	------	(*)	------	.3	----------	1,646
Jones Fife	.9	(*)	1.8	1.1	.5	.3	2,209	1,406
Clarkan	------	------	------	------	------	.2	----------	1,154
Redhart	------	------	------	------	------	.2	----------	810

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Kentucky—Continued								
Soft red winter—Continued								
Fulhio						0.1		403
Rice	0.8	1.8	0.3	0.1	2.6	------	12,071	----------
Rudy	.7	1.2	.8	1.8	1.5	------	6,833	----------
Red Wave	4.2	1.3	(*)	1.1	1.3	------	5,862	----------
Russian Red	1.3	.4	.8	.6	.3	------	1,636	----------
Hard red winter	------	------	1.1	1.2	------	.8	----------	4,071
Turkey	.1	.1	1.0	1.1	------	.8	----------	4,030
White	------	------	.2	(*)	------	.2	----------	1,228
Yorkwin	------	------	------	------	------	.2	----------	1,223
Others and not reported	18.1	12.4	9.8	5.9	5.5	.3	25,654	1,570
Total	------	------	------	------	------	------	464,000	512,000
Maine:							(10)	(12)
Hard red spring	------	------	------	100.0	100.0	95.9	4,000	1,917
Marquis	71.2	57.8	------	95.8	43.0	50.1	1,720	1,002
Red Fife	13.8	33.2	------	2.3	10.5	22.2	420	445
Garnet	------	------	------	------	27.0	11.8	1,080	235
Stanley	------	------	------	------	------	11.8	----------	235
Progress	------	------	------	------	15.0	------	600	----------
Thatcher	------	------	------	------	1.0	------	40	----------
White	------	------	------	------	------	4.1	----------	83
White Fife	------	------	------	------	------	4.1	----------	83
Others and not reported	15.0	9.0	------	1.9	3.5	------	140	----------
Total	------	------	------	------	------	------	4,000	2,000
Maryland:							(114)	(82)
Soft red winter	------	------	100.0	100.0	100.0	100.0	396,000	401,000
Leap	6.6	14.5	20.9	28.5	23.1	37.9	91,268	151,930
Nittany	------	.3	6.3	7.2	12.0	19.3	47,332	77,460
Leapland	------	------	------	------	1.0	10.1	4,057	40,399
Fulcaster	26.8	42.9	25.5	31.5	30.8	8.7	122,054	34,792
Mammoth Red	.2	1.0	9.7	10.3	6.2	7.0	24,685	28,047
Fultz	17.7	14.6	7.2	2.3	6.0	4.2	23,734	16,793
Thorne	------	------	------	------	------	3.3	----------	13,164
Poole	1.8	4.9	4.9	.1	.3	3.0	1,248	12,159
China	1.9	3.7	1.6	.6	1.2	2.6	4,877	10,677
Forward	------	------	1.5	4.0	5.9	1.5	23,342	6,023
Purplestraw	2.0	.6	3.4	------	.1	1.3	493	5,200
Currell	13.3	11.4	4.9	4.0	1.8	.6	6,936	2,220
Fultzo-Mediterranean	2.9	.4	.5	.6	------	.4	----------	1,600
Valprize	------	------	------	------	------	.1	----------	376
Redhart	------	------	------	------	------	(*)	----------	160
Red Wave	1.4	.9	.2	.8	.3	------	1,266	----------
Rudy	2.0	1.0	1.2	1.2	.1	------	458	----------
Others and not reported	23.4	3.8	12.2	8.9	11.2	------	44,250	----------
Total	------	------	------	------	------	------	396,000	401,000
Michigan:							(340)	(156)
White	------	------	46.9	52.9	53.5	65.8	409,974	638,974
Dawson	6.1	3.3	2.3	40.4	47.3	46.3	362,445	449,519
Yorkwin	------	------	------	------	(*)	11.8	286	114,124
Goldcoin	15.1	20.7	40.4	8.3	4.0	2.9	30,525	28,444
Soft red winter	------	------	52.3	46.1	42.9	34.0	328,241	330,271
Red Rock	22.1	38.3	28.8	23.4	16.0	14.4	122,336	140,076
Baldrock	------	------	------	3.0	13.2	8.6	101,386	84,054
Thorne	------	------	------	------	------	3.2	----------	31,346
Poole	2.5	4.9	1.8	1.7	1.3	1.3	9,841	12,169
Red Wave	6.6	6.4	5.6	5.0	2.0	.9	15,196	8,350
Nigger	3.1	1.9	1.2	1.5	.8	.7	6,154	7,178
Red May	1.1	1.9	2.6	1.6	------	.5	----------	5,060
Berkley Rock	------	------	2.1	2.5	.9	.4	6,765	3,872
Forward	------	------	.1	------	(*)	.4	94	3,621
Russian	------	2.0	.6	------	1.0	.3	7,545	2,978
Red Clawson	3.9	1.9	1.1	1.5	.7	.3	5,513	2,696
Trumbull	------	.1	1.0	.7	2.1	.3	15,649	2,517
Rudy	2.1	.4	.5	.3	.7	.2	4,904	1,878
Fulcaster	.6	1.2	.9	.7	1.7	.2	12,884	1,874
Fultz	------	------	------	------	------	.1	----------	768
Jones Fife	.3	.1	------	(*)	(*)	(*)	365	217
Diehl-Mediterranean	1.3	2.1	.5	.2	.3	------	2,465	----------
Harvest Queen	.1	------	(*)	------	.1	------	864	----------

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Michigan—Continued								
Soft red winter—Continued								
Fulhio	------	------	------	------	0.1	------	545	----------
Gladden	------	------	------	------	(*)	------	312	----------
Goens	0.4	1.2	0.4	0.2	(*)	------	214	----------
Fultzo-Mediterranean	------	------	------	------	(*)	------	200	----------
Valprize	------	------	------	------	(*)	------	182	----------
Hard red spring	------	------	.4	.3	1.4	0.2	10,800	1,713
Marquis	6.7	.2	.4	.3	1.4	.2	10,514	1,561
Thatcher	------	------	------	------	------	(*)	----------	147
Hard red winter	------	------	.3	.7	2.2	(*)	16,985	42
Turkey	.8	.3	.1	.3	1.4	(*)	10,817	41
Purkof	------	------	------	------	.7	------	5,391	----------
Kanred	.3	.1	------	.2	(*)	------	23	----------
Others and not reported	26.9	13.0	9.6	8.2	4.3	7.0	32,585	68,510
Total	------	------	------	------	------	------	766,000	971,000
Minnesota:							(502)	(301)
Hard red spring	------	------	70.0	80.7	85.3	83.8	1,372,951	1,114,202
Rival	------	------	------	------	------	31.5	----------	418,671
Regent	------	------	------	------	------	21.3	----------	282,431
Thatcher	------	------	------	------	71.6	16.8	1,152,535	223,206
Pilot	------	------	------	------	------	6.1	----------	80,709
Renown	------	------	------	------	.3	4.8	4,603	64,144
Marquillo	------	------	.8	8.1	7.1	1.0	113,934	14,041
Carleeds	------	------	------	------	.1	.6	1,837	8,137
Great Northern	------	------	------	------	(*)	.3	64	4,444
Reward	------	------	(*)	.5	.4	.3	6,645	3,746
Newthatch	------	------	------	------	------	.2	----------	2,217
Premier	------	------	------	------	------	.1	----------	1,635
Ceres	------	------	1.5	21.3	3.0	.2	48,126	2,139
Apex	------	------	------	------	------	.1	----------	1,507
Preston	21.1	5.4	3.6	1.9	.2	.1	3,042	1,175
Marquis	57.3	72.2	59.3	44.3	1.5	.1	24,140	1,158
Humpback	.5	.1	.1	(*)	------	(*)	----------	538
Hope	------	------	------	.5	.7	(*)	10,359	462
Progress	------	------	------	.2	.1	(*)	2,260	295
Mida	------	------	------	------	------	(*)	----------	59
Ruby	------	1.9	3.2	2.2	.1	(*)	1,440	38
Komar	------	------	------	------	.1	------	1,060	----------
Hayes Bluestem	9.5	2.5	.4	.5	(*)	------	766	----------
Kota	------	1.0	.2	.1	(*)	------	340	----------
Garnet	------	------	------	.2	(*)	------	85	----------
Hard red winter	------	------	11.3	10.1	8.6	11.4	137,619	151,009
Minturki	------	1.9	6.2	9.3	6.9	11.0	111,050	146,046
Turkey	1.6	4.0	4.9	.8	1.6	.2	26,179	2,736
Marmin	------	------	------	------	------	.2	----------	2,028
Iowin	------	------	------	------	(*)	------	40	----------
Durum	------	------	17.7	8.3	6.0	4.8	97,228	63,789
Mindum	------	.7	1.9	2.8	2.2	4.3	35,206	56,817
Durum (varieties not reported)	3.6	5.9	14.1	5.1	3.8	.4	60,451	5,632
Pentad	(*)	1.1	.9	.4	(*)	.1	106	1,180
Carleton	------	------	------	------	------	(*)	----------	(*)
Kubanka	------	.1	.5	.1	.1	------	1,201	----------
Golden Ball	------	------	------	------	(*)	------	107	----------
White	------	------	.9	.8	.1	------	1,202	----------
Florence	------	(*)	.9	.8	.1	------	1,202	----------
Others and not reported	6.4	3.2	1.5	.8	.1	.3	2,222	3,809
Total	------	------	------	------	------	------	1,609,000	1,329,000
Mississippi:							(0)	(39)
Soft red winter	------	------	100.0	100.0	------	92.3	----------	23,075
Flint	------	------	------	50.5	------	40.5	----------	10,112
Hardired	------	------	------	------	------	19.5	----------	4,884
Redhart	------	------	------	------	------	18.0	----------	4,498
Fultz	------	------	------	------	------	12.0	----------	3,001
Sanford	------	------	------	------	------	2.3	----------	580
Hard red winter	------	------	------	------	------	7.7	----------	1,925
Tenmarq	------	------	------	------	------	7.7	----------	1,925
Others and not reported	100.0	100.0	100.0	49.5	------	------	----------	----------
Total	------	------	------	------	------	------	----------	25,000

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Missouri:							(332)	(276)
Soft red winter			91.5	94.1	87.4	92.9	1,647,634	1,592,839
Clarkan					3.4	38.6	63,895	661,730
Fultz	35.2	35.9	24.6	25.7	15.8	13.7	297,102	234,717
Red May	9.7	7.8	18.9	28.0	17.3	9.3	326,457	159,873
Kawvale					15.5	8.3	293,007	141,753
Currell	3.4	1.4	9.0	5.5	5.8	5.4	110,078	93,128
Fulhio		.1	(*)	.5	3.6	3.7	68,349	63,273
Red Wave	1.7	5.3	2.9	3.3	1.8	3.6	33,856	62,311
Fulcaster	6.0	12.3	13.9	9.9	6.1	3.1	115,748	52,583
Early Premium					2.5	1.8	46,566	31,144
Poole	3.8	8.7	6.9	7.0	2.8	1.0	53,449	16,350
Harvest Queen	3.9	3.4	3.5	5.8	2.7	.6	50,052	10,699
Mediterranean	7.5	4.4	2.6	3.0	1.3	.6	24,870	10,649
Thorne						.5		8,036
Mealy						.1		2,362
Russian Red	.3	1.0	.1		.1	.1	1,923	1,362
Fultzo-Mediterranean	2.0	1.5	.6	.8	.1	.1	1,500	975
Gipsy	.1	.1	.4	.3		(*)		284
Rice					1.0		18,085	
Prosperity	.4		.1	.3	.6		10,833	
Valley				.4	.4		8,029	
Jones Fife	.6	(*)	.1	.3	.1		1,475	
Redhart					(*)		49	
Hard red winter			8.5	5.9	12.6	7.0	237,890	118,891
Iobred			.1	.2	3.8	3.0	71,582	50,782
Turkey	13.0	7.6	6.3	4.9	6.0	2.7	113,177	47,304
Kanred		1.9	1.3	.5	1.3	.6	24,242	9,544
Iowin					.1	.5	2,818	8,719
Tenmarq					.2	.1	4,316	846
Blackhull		(*)	.4	.1	.5		8,476	
Ioturk				(*)	.1		2,150	
Chiefkan					(*)		294	
Cheyenne					(*)		202	
Durum						.1		2,270
Pentad						.1		2,250
White					(*)		476	
Arco					(*)		449	
Others and not reported	12.4	8.6	8.3	3.5	7.1	2.5	132,971	43,326
Total							1,886,000	1,714,000
Montana:							(508)	(214)
Hard red spring			82.2	77.2	76.8	69.9	3,104,931	3,015,211
Marquis	40.3	72.2	72.8	66.7	55.6	28.4	2,247,200	1,226,726
Thatcher					2.2	22.5	89,337	969,386
Ceres			.4	4.4	16.0	13.3	646,368	574,323
Pilot					(*)	2.9	(*)	122,874
Reward			(*)	.3	.1	1.5	1,583	65,412
Supreme			6.8	5.4	2.7	.9	110,018	38,112
Regent						.1		3,563
Canus						.1		3,348
Red Bobs		.4	.2	.1	.1	.1	4,099	3,315
Komar				(*)		.1		2,268
Reliance				.1		(*)		1,659
Vesta						(*)		587
Red Fife	3.2	.6	.1		(*)		1,248	
Preston	1.3	.1	.3		(*)		789	
Carleeds					(*)		424	
Renown					(*)		212	
Garnet					(*)		(*)	
Great Northern					(*)		(*)	
Hard red winter			15.5	20.0	21.6	28.6	874,232	1,233,631
Turkey	21.6	18.9	12.5	16.1	16.3	18.9	657,583	816,229
Karmont		(*)	1.7	2.6	2.8	4.4	114,148	190,394
Yogo					.5	3.1	20,873	134,956
Newturk			.3	.6	1.2	1.4	49,470	59,023
Montana No. 36	(*)	.7	.7	.5	.6	.4	24,500	15,256
Ridit					(*)	.2	1,145	7,880
Cache						.1		5,229
Wasatch						(*)		2,210
Tenmarq						(*)		1,675
Kanred		.1	.2	.2	.2	(*)	5,383	450
Mosida				(*)	(*)		345	

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Montana—Continued								
Durum			1.1	0.8	0.8	0.7	31,850	30,326
Durum (varieties not reported)	15.8	3.7	.9	.8	.7	.4	28,622	17,016
Kubanka					(*)	.3	1,079	13,266
Peliss	.1	(*)	.1				1,144	
Pentad	.2	(*)		(*)	(*)		623	
Golden Ball					(*)		212	
Mindum				(*)	(*)		155	
Apex					(*)		155	
White			.9	1.3	.6	.7	23,522	28,867
Onas						.3		11,599
Federation			.5	.9	.3	.1	11,520	5,700
Pacific Bluestem	.6		.1	.1	.1	.1	2,755	3,973
Rex						.1		3,438
Club (varieties not reported)	.6	.2	.1	.1	.1	(*)	1,806	1,981
Baart	(*)	.2	.1	.1	.1	(*)	1,710	1,265
Dicklow	(*)	(*)	.1	.1	.1	(*)	4,519	634
Goldcoin	(*)	(*)	(*)	(*)	(*)	(*)	216	275
Florence	(*)	(*)	(*)	(*)	(*)		981	
Soft red winter			.3	.7	.2	.1	6,465	4,965
Jones Fife	1.1	.5	.4	.6	.2	.1	5,579	2,495
Triplet				(*)	(*)	.1	882	2,470
Others and not reported	15.2	2.4	1.7	.3	.1	.1	4,317	4,013
Total							4,041,000	4,313,000
Nebraska:							(542)	(704)
Hard red winter			92.7	90.4	95.3	96.5	3,789,224	3,575,604
Turkey	82.7	63.5	68.2	59.5	58.0	43.4	2,305,869	1,607,565
Cheyenne				1.2	14.8	22.7	589,961	841,858
Nebred					.2	15.3	7,770	566,129
Blackhull		(*)	.6	1.2	6.2	4.8	246,860	177,462
Nebraska No. 60		.5	8.9	18.9	10.1	4.8	402,997	176,550
Tenmarq					.2	2.8	6,156	103,676
Iobred			(*)	.1	1.5	1.0	61,216	35,918
Kanred		26.1	13.5	8.7	2.4	.8	93,993	28,035
Iowin					.1	.5	2,307	17,885
Pawnee						.3		10,549
Chiefkan					.1	.2	4,891	7,218
Minturki		.2		(*)	.6	.1	25,180	2,759
Early Blackhull					(*)		75	
Hard red spring			4.9	7.5	3.3	2.4	131,703	90,127
Thatcher					.3	.9	11,618	34,875
Ceres				2.9	1.6	.8	62,300	31,249
Marquis	4.2	2.2	3.9	2.8	.8	.2	32,070	8,756
Komar					.1	.2	2,093	7,897
Java	.3		(*)	.2	.4	.1	16,416	4,246
Supreme						.1		1,668
Rival						(*)		785
Haynes Bluestem	.7	(*)	.2	.1		(*)		544
Dixon			.4	.8	.1	(*)	2,915	107
Sea Island	.2	.2		.1	(*)		1,790	
Soft red winter			.9	1.1	.9	1.0	35,231	35,396
Kawvale					.1	.5	2,285	19,387
Fulcaster	(*)	.6	.3	.4	.7	.4	29,260	15,639
Harvest Queen	(*)	(*)	.5	.6	.1	(*)	2,604	370
Red May	(*)	.2	(*)		(*)		805	
Durum			1.5	1.0	.5	.1	21,205	3,458
Durum (varieties not reported)	4.9	2.3	1.3	.9	.4	.1	17,614	2,395
Kahla	.1		(*)		(*)	(*)	785	1,063
Pentad	(*)	.2	.1	.1	.1		2,399	
White			(*)		(*)	(*)	637	415
Baart						(*)		415
Florence			(*)		(*)		625	
Others and not reported	6.9	4.0	2.1	1.5	1.1		45,146	
Total							3,978,000	3,705,000
Nevada:							(17)	(20)
White			96.0	82.2	74.6	77.1	11,938	13,887
Federation			21.4	31.2	26.6	30.2	4,259	5,435
Baart	.9	18.9	15.9	13.3	12.7	25.3	2,025	4,559
White Federation			6.4	1.6	13.1	8.5	2,094	1,531
Ramona						4.1		730
Dicklow		1.4	6.0	10.8	5.3	3.7	849	673
Lembi						2.4		435

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Nevada—Continued								
White—Continued								
White Federation 38						2.4		431
Pacific Bluestem	30.5	12.8	8.8	11.2	2.7	.5	438	93
Hard Federation			5.0	2.3	4.8		766	
Club (varieties not reported)	17.3	4.6	19.9	1.8	3.8		600	
Sonora	3.6	12.1		8.0	2.6		425	
Hard red winter			1.7	15.6	24.1	19.5	3,860	3,503
Turkey	7.3	27.9	1.7	15.5	18.1	19.5	2,900	3,503
Tenmarq					5.2		825	
Hard red spring			2.3	2.2	1.3	3.4	202	610
Thatcher						2.6		472
Komar						.7		115
Marquis	13.6	12.9	2.2	2.2	1.2	.1	194	23
Others and not reported	26.8	9.4	12.7	2.1	3.9		625	
Total							16,000	18,000
New Jersey:							(63)	(28)
Soft red winter			97.3	100.0	97.5	98.5	68,269	73,879
Leap	6.2	14.8	43.5	64.8	79.4	77.7	55,598	58,289
Thorne						12.0		9,000
Nittany		2.6	12.1	13.7	8.1	4.1	5,656	3,078
Forward			8.3	10.9	5.4	1.7	3,812	1,296
Mediterranean	31.7	13.6	.5		.1	1.1	58	777
Fulcaster	19.8	19.8	10.3	3.3	2.4		1,653	
Poole		.2			(*)		36	
White			2.7		2.5	1.4	1,731	1,053
Yorkwin					.2	1.0	117	733
Dawson			.8		2.3	.4	1,577	280
Honor						(*)		30
Hard red winter						.1		68
Turkey						.1		66
Others and not reported	42.3	49.0	24.5	7.3	2.1	1.9	1,493	1,451
Total							70,000	75,000
New Mexico:							(48)	(35)
Hard red winter			91.6	93.0	93.9	92.0	345,646	307,221
Blackhull			1.0	7.0	8.8	67.8	32,588	226,354
Turkey	61.5	76.7	57.2	65.4	76.1	22.3	280,194	74,492
Kanred		4.9	33.3	19.4	8.9	1.9	32,627	6,375
Hard red spring			2.4	4.1	4.3	6.9	15,962	23,180
Thatcher					.1	3.2	200	10,663
Marquis	6.0	3.6	2.4	3.8	3.5	2.8	12,849	9,517
Komar					.7	.9	2,541	3,000
Kota				.2	.1		211	
White			5.0	2.4	1.6	1.1	5,789	3,599
Sonora	14.6	5.7	4.1	2.0	1.0	1.0	3,773	3,366
Baart	2.1	.8	.5	(*)	.1	.1	332	233
Defiance	2.5	.7	.3	.2	.4		1,578	
Durum			1.0	.5	.2		603	
Durum (varieties not reported)	7.1	4.4	1.0	.4	.2		603	
Others and not reported	6.2	3.2	.2	1.6	.1		504	
Total							368,000	334,000
New York:							(191)	(191)
White			82.5	80.1	85.3	92.1	237,170	339,975
Yorkwin					43.7	86.7	121,423	319,867
Goldcoin	47.9	69.1	57.7	48.0	20.3	2.2	56,475	7,947
Honor		1.5	7.3	26.2	13.3	2.1	37,073	7,781
Cornell 595						.3		1,126
Dawson	11.5	10.0	10.2	3.9	3.5		9,692	
Soft red winter			15.3	18.6	13.8	7.1	38,276	26,089
Nured						4.4		16,185
Forward		.9	7.9	13.2	6.0	1.1	16,573	3,986
Leap	.1	.7	.8	.7	.5	.9	1,362	3,245
Valprize				1.8	6.2	.3	17,253	1,308
Nittany		.1	.5	.1	(*)	.3	165	1,158
Red Clawson	1.0			.2	.4		980	
Hard red spring			2.2	1.3	.9	.8	2,554	2,936
Marquis	11.3	1.0	2.0	1.2	.9	.8	2,482	2,935
Others and not reported	28.2	16.7	13.6	4.7	5.2	.9	14,522	3,462
Total							278,000	369,000

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
North Carolina:							(338)	(487)
Soft red winter			96.8	97.0	97.4	97.7	431,660	599,151
Redhart			.7	11.0	28.9	54.6	128,059	334,711
Leap	24.7	18.0	23.4	28.1	17.4	10.8	77,029	66,023
Purplestraw	13.9	10.9	13.4	16.5	13.6	6.4	60,389	39,088
Flint	5.3	4.7	5.3	9.3	5.4	5.4	24,162	32,943
Forward				1.6	5.0	5.3	22,069	32,915
Fulcaster	32.2	39.6	33.9	21.7	17.7	5.2	78,244	32,149
Hardired						1.7		10,730
Carala						1.2		7,247
Fultz	3.0	4.6	5.2	2.7	2.0	1.1	8,850	6,551
V. P. I. 131			.4	.9	.3	.5	1,446	3,010
Rice	1.2	2.2	.3	1.2	1.0	.4	4,346	2,541
Oakley	.2	.5	.1		.1	.4	657	2,531
Fultzo-Mediterranean	1.2	4.3	.4	.1	.5	.4	2,187	2,289
Nittany					.2	.1	711	645
Diehl-Mediterranean						.1		504
Poole	(*)	.1	.2	.1	1.3	.1	5,620	319
White			3.2	3.0	2.6	2.3	11,340	13,849
Greeson	.8	3.3	2.8	3.3	2.4	2.2	10,709	13,296
Others and not reported	17.5	11.8	13.9	3.5	4.2	4.1	18,522	25,508
Total							443,000	613,000
North Dakota:							(1,038)	(715)
Hard red spring			60.1	77.9	68.9	82.3	5,771,895	8,361,179
Thatcher				(*)	41.6	26.4	3,481,333	2,680,753
Rival					(*)	25.8	1,011	2,617,083
Regent						9.8		995,776
Pilot					(*)	7.0	1,964	708,130
Renown					.6	4.5	45,514	456,497
Vesta						3.7		373,795
Ceres			3.0	34.0	20.3	2.7	1,965,854	275,773
Reward			(*)	1.5	1.2	.9	97,028	89,496
Premier						.3		25,833
Carleeds					1.0	.2	86,753	23,912
Great Northern					.1	.2	11,634	23,047
Apex					(*)	.2	482	21,145
Mida						.2		18,425
Marquis	47.0	52.9	52.6	39.4	3.0	.1	251,481	11,480
Marvel			(*)	.1	.3	(*)	26,089	1,620
Progress			.1	.2	.1	(*)	6,834	1,504
Marquillo				(*)	.2	(*)	18,101	1,414
Preston	8.4	2.7	1.4	.9	.1	(*)	8,855	1,100
Kota		4.9	.8	.4		(*)		825
Hope				(*)	.2		15,716	
Coronation						(*)	2,182	
Power	.1	.6	.2	.2		(*)	1,017	
Ruby		3.3	.9	.3		(*)	812	
Komar				(*)		(*)	801	
Haynes Bluestem	8.0	.6	.2	.1		(*)	516	
Red Fife	5.8	1.6	.2	.1		(*)	267	
Durum			39.0	21.7	31.0	17.7	2,598,449	1,797,409
Durum (varieties not reported)	28.7	22.5	23.3	8.9	13.5	8.3	1,133,766	846,267
Mindum			3.0	4.0	8.2	6.0	686,288	612,189
Kubanka	.3	5.3	6.9	6.9	5.0	1.6	418,301	163,435
Pentad	.4	2.7	4.3	1.7	4.1	1.5	339,012	148,958
Stewart						.2		12,389
Carleton						.1		6,113
Acme	(*)	.1	.1	(*)		(*)		436
Arnautka			.1	(*)	.1		4,908	
Golden Ball					(*)		4,048	
Monad		.8	.5	.1	(*)		2,233	
Nodak		(*)	.3	(*)	(*)		1,892	
Peliss		(*)	(*)	.1	(*)		957	
Hard red winter			.2	.2	.1	(*)	4,300	2,566
Turkey	.4	.2	.2	.1	.1	(*)	4,284	2,552
White			.7	.2	(*)	(*)	4,300	846
Florence		(*)	.7	.2	(*)	(*)	3,346	840
Others and not reported	.9	1.8	1.2	.8	.3	.4	24,721	41,213
Total							8,378,000	10,162,000

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Ohio:							(451)	(516)
Soft red winter	------	------	98.4	97.1	96.8	99.0	1,972,548	2,036,865
Thorne	------	------	------	------	.1	56.0	2,894	1,153,185
Trumbull	0.1	32.1	53.6	50.7	54.0	20.8	1,100,763	427,267
Fulhio	------	4.4	11.9	15.6	20.4	6.6	415,330	135,330
Fultz	10.3	5.8	2.9	4.1	2.7	2.8	53,947	57,899
Nigger	3.5	5.3	2.9	3.3	3.1	2.8	63,642	57,704
Goens	2.2	2.1	.8	1.8	1.8	2.6	35,555	52,614
Poole	38.8	23.5	9.1	9.0	3.9	.9	79,592	18,498
Fulcaster	.8	1.2	.7	.7	.3	.7	5,726	14,107
Gladden	.3	5.4	2.6	1.8	1.4	.4	29,120	7,450
Red May	.5	.2	.9	.4	.1	.3	2,753	5,326
Leap	(*)	.4	1.4	.2	.5	.1	9,927	2,962
Mediterranean	1.9	1.6	.7	.4	.2	.1	4,190	2,640
Rudy	1.6	.8	.8	.3	.1	.1	2,330	2,433
Red Wave	8.5	2.1	1.0	1.0	.6	.1	12,131	2,161
Harvest Queen	------	------	------	------	------	.1	----------	1,975
Nittany	------	------	------	------	(*)	.1	----------	1,797
Gipsy	2.9	2.1	1.1	1.6	.4	(*)	8,786	818
Red Indian	------	------	------	------	.3	(*)	5,393	638
Forward	------	------	------	(*)	.2	(*)	3,209	605
Portage	.1	3.1	.8	1.2	.3	(*)	6,812	524
Red Clawson	------	------	------	------	.1	------	1,719	----------
Nabob	------	------	(*)	.1	.1	------	1,687	----------
Valley	------	------	------	------	(*)	------	614	----------
Red Rock	.1	.1	(*)	(*)	(*)	------	36	----------
Purdue No. 1	------	------	------	------	(*)	------	29	----------
White	------	------	.6	2.4	2.8	.7	57,028	14,537
Goldcoin	2.6	.9	.5	2.3	2.5	.6	50,712	11,711
Dawson	.2	------	------	(*)	.1	.1	2,747	2,087
Hard red winter	------	------	.7	.3	.4	.3	7,911	6,598
Turkey	.2	.5	.6	.2	.1	.2	2,253	2,945
Michikof	------	------	(*)	------	.3	.1	4,943	2,919
Purkof	------	------	------	(*)	(*)	(*)	167	377
Hard red spring	------	------	.3	.2	(*)	------	513	----------
Preston	------	(*)	.1	(*)	(*)	------	494	----------
Others and not reported	25.4	8.4	7.6	5.3	6.4	4.5	130,499	92,028
Total	------	------	------	------	------	------	2,038,000	2,058,000
Oklahoma:							(212)	(312)
Hard red winter	------	------	91.6	85.4	91.1	95.8	4,417,099	4,988,485
Tenmarq	------	------	------	(*)	10.0	40.3	484,321	2,096,400
Blackhull	------	12.2	34.2	32.0	36.6	16.9	1,772,734	881,037
Turkey	68.6	52.3	47.4	44.9	29.3	15.0	1,420,815	782,167
Early Blackhull	------	------	------	------	1.9	7.0	92,729	363,437
Chiefkan	------	------	------	------	1.5	5.9	75,383	308,906
Cheyenne	------	------	------	(*)	.7	4.0	32,996	210,603
Red Chief	------	------	------	------	------	3.5	----------	182,155
Triumph	------	------	------	------	------	1.3	----------	65,878
Kanred	.2	19.5	7.5	5.0	2.5	.7	119,927	39,018
Redhull	------	------	.1	1.1	1.2	.4	59,216	22,206
Reliant	------	------	------	------	------	.1	----------	6,022
Iobred	------	------	------	(*)	(*)	.1	923	2,983
Ioturk	------	------	------	------	------	.1	----------	2,505
Comanche	------	------	------	------	------	(*)	----------	1,632
Sibley 81	------	------	------	.6	1.5	(*)	74,077	1,500
Alton	------	------	.1	.2	2.9	(*)	140,218	1,215
Pawnee	------	------	------	------	------	(*)	----------	228
Nebred	------	------	------	------	------	(*)	----------	194
Eagle Chief	------	------	.2	.6	.9	------	45,690	----------
Enid	------	------	------	------	.2	------	7,756	----------
Ukrainka	------	------	------	------	.1	------	4,116	----------
Soft red winter	------	------	8.2	14.6	8.9	4.2	433,901	217,515
Fulcaster	6.8	5.3	2.1	2.9	2.5	1.2	123,532	59,832
Currell	1.5	1.9	1.6	4.5	3.0	1.0	144,934	52,699
Clarkan	------	------	------	------	.1	.8	6,541	39,119
Red May	.8	.4	1.0	.6	------	.5	----------	25,455
Kawvale	------	------	------	------	.4	.3	19,308	14,415
Mediterranean	4.6	1.4	1.0	2.1	.8	.3	40,076	14,175
Harvest Queen	4.6	3.2	.8	1.8	1.3	.1	62,444	4,255
Nigger	------	------	------	------	------	.1	----------	4,037
Fultz	3.3	.6	.5	1.1	.6	(*)	28,656	1,326

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Oklahoma—Continued								
Soft red winter—Continued								
Early Premium	----	----	----	----	----	(*)	----	853
Red Rock	----	----	----	----	----	(*)	----	325
Others and not reported	9.6	3.2	3.5	2.6	2.0	0.4	94,608	21,423
Total	----	----	----	----	----	----	4,851,000	5,206,000
Oregon:							(222)	(127)
White	----	----	71.3	71.4	80.0	86.8	670,281	846,956
Rex	----	----	----	----	28.8	27.5	241,511	268,020
Goldcoin	14.4	10.4	13.4	10.4	4.7	14.4	39,103	140,121
Federation	----	1.7	23.1	27.3	24.9	11.3	208,738	109,888
Alicel	----	----	----	----	.3	6.1	2,596	59,722
Wilhelmina	----	----	2.1	3.1	3.5	5.8	29,560	56,307
Golden	----	----	----	(*)	.1	3.8	911	36,774
Hybrid 128	9.6	29.4	12.6	9.4	1.8	3.6	15,121	35,393
Hymar	----	----	----	----	.1	3.5	785	34,614
White Winter	4.7	3.2	2.4	1.8	2.7	3.3	22,177	32,093
Baart	3.7	.8	1.3	1.5	2.3	1.8	18,971	17,388
White Federation	----	----	----	----	1.0	1.6	8,793	15,834
Oregon Zimmerman	----	----	.3	1.7	2.1	1.2	17,402	11,915
Hard Federation	----	1.1	3.3	.7	----	.9	----	8,618
Galgalos	1.5	1.4	.6	.5	.7	.8	5,662	7,691
Jenkin	.4	2.0	2.0	2.2	.7	.7	6,086	6,512
Redchaff	2.0	.2	.6	.5	.4	.2	3,744	2,259
Rink	1.3	2.2	2.8	.9	.6	.2	5,007	1,614
Pacific Bluestem	11.3	3.2	1.4	.9	.7	.1	5,726	987
Ramona	----	----	----	----	----	(*)	----	389
Hybrid 63	1.6	.7	----	.7	.3	(*)	2,876	341
Athena	----	----	----	----	.1	(*)	705	316
Defiance	1.7	.6	.2	.4	.1	(*)	1,068	84
Lemhi	----	----	----	----	----	(*)	----	76
Hard Federation 31	----	----	----	.5	1.1	----	8,981	----
Albit	----	----	----	4.3	.5	----	4,461	----
Hybrid 143	----	.1	----	.5	.1	----	1,089	----
Dicklow	----	.2	.1	(*)	.1	----	1,071	----
Union	----	----	----	----	.1	----	974	----
Hood	----	----	----	.2	.1	----	906	----
Bluechaff	(*)	.2	.1	(*)	.1	----	810	----
Pilcraw	----	----	----	----	.1	----	687	----
Sonora	1.2	.2	.5	(*)	.1	----	408	----
Arco	----	----	----	1.0	(*)	----	98	----
Hard red winter	----	----	25.0	22.1	15.5	12.0	129,600	117,479
Turkey	13.2	26.0	24.6	20.0	14.2	10.7	118,902	104,243
Rio	----	----	----	.1	.3	1.1	2,087	10,667
Mosida	----	----	(*)	.5	.3	.3	2,103	2,569
Oro	----	----	.1	.3	.4	----	3,685	----
Ridit	----	----	.2	1.1	.1	----	632	----
Hard red spring	----	----	2.9	3.4	4.1	1.0	34,287	9,814
Huston	2.1	2.9	.6	1.5	1.5	.5	12,456	5,106
Marquis	2.2	1.7	1.3	1.0	2.3	.3	19,492	2,976
Kinney	2.2	1.0	.9	.8	----	.2	----	1,732
Thatcher	----	----	----	----	.1	----	358	----
Red Bobs	----	----	----	----	(*)	----	96	----
Soft red winter	----	----	.8	3.1	.4	.2	3,786	1,751
Red Russian	.7	1.3	.3	.2	.3	.1	2,423	1,411
Triplet	----	.1	.4	2.5	.1	(*)	1,173	340
Others and not reported	26.2	9.4	4.8	3.5	2.2	----	18,520	----
Total	----	----	----	----	----	----	838,000	976,000
Pennsylvania:							(201)	(758)
Soft red winter	----	----	99.2	99.9	99.6	97.9	950,405	919,879
Nittany	----	22.9	32.9	34.3	41.9	35.2	399,491	330,604
Leap	1.8	19.7	25.5	26.4	25.1	20.8	239,841	195,254
Thorne	----	----	----	----	----	19.7	----	184,830
Forward	----	.2	11.7	16.5	19.0	14.7	181,655	137,978
Fulcaster	23.4	18.2	8.2	8.6	3.4	2.7	32,021	25,413
Fultz	16.5	7.3	2.1	1.9	.7	1.0	6,338	8,981
Red Wave	7.5	4.2	1.3	1.0	1.1	.8	10,201	7,214
Rudy	3.7	2.2	1.8	.3	.1	.5	1,089	4,414
Poole	6.4	2.6	.5	.7	1.3	.4	11,983	3,768
Nured	----	----	----	----	----	.3	----	3,195
Grandprize	1.0	.2	.1	.3	(*)	.3	242	2,535

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Pennsylvania—Continued								
Soft red winter—Continued								
Fulhio	----	(*)	0.1	0.3	0.6	0.2	6,104	2,052
Trumbull	----	0.1	.3	.3	(*)	.2	348	1,827
Red Rock	----	.9	.5	.7	2.4	.2	23,341	1,824
Valprize	----	----	----	----	----	.1	----	1,038
Gladden	----	----	----	----	----	.1	----	588
Mealy	1.3	.3	.1	.2	.1	(*)	676	386
Goens	(*)	----	----	(*)	----	(*)	----	252
Fairfield	----	----	----	----	----	(*)	----	221
Mediterranean	9.3	2.0	.8	1.4	.6	(*)	6,174	215
Leapland	----	----	----	----	----	(*)	----	214
Russian Red	----	----	----	----	----	(*)	----	184
Red Clawson	.3	----	.1	----	.3	(*)	2,429	94
Diehl-Mediterranean	1.4	.6	----	(*)	.1	----	947	----
White	----	----	.6	.1	.1	1.8	462	16,959
Yorkwin	----	----	----	----	.1	1.8	435	16,830
Hard red winter	----	----	.1	(*)	.3	.3	2,722	3,153
Purkof	----	----	(*)	.1	.3	.3	2,685	3,041
Turkey	----	----	----	----	----	(*)	----	77
Hard red spring	----	----	.1	(*)	(*)	(*)	411	9
Marquis	.2	(*)	.1	(*)	(*)	(*)	390	9
Others and not reported	27.2	18.6	13.9	7.0	2.9	.7	27,610	6,962
Total	----	----	----	----	----	----	954,000	940,000
South Carolina:							(214)	(143)
Soft red winter	----	----	100.0	100.0	100.0	100.0	216,000	290,000
Redhart	----	----	----	32.5	47.5	49.8	102,791	144,494
Purplestraw	38.1	33.1	37.3	34.4	29.1	26.8	62,870	77,666
Flint	8.5	19.3	9.5	24.1	18.7	14.8	40,332	42,957
Hardired	----	----	----	----	----	7.8	----	22,751
Leap	15.3	5.0	4.1	2.8	1.3	.3	2,730	838
Fulcaster	3.6	9.1	7.3	1.9	.7	.3	1,467	812
Sanett	----	----	----	----	----	.2	----	482
Forward	----	----	----	.6	.3	----	614	----
Gasta	----	----	----	----	.1	----	148	----
Others and not reported	34.5	33.5	41.8	3.7	2.3	----	5,048	----
Total	----	----	----	----	----	----	216,000	290,000
South Dakota:							(563)	(534)
Hard red spring	----	----	55.7	72.7	71.6	84.7	2,152,039	2,755,342
Rival	----	----	----	----	(*)	31.2	(*)	1,014,100
Ceres	----	----	.4	25.2	33.5	20.1	1,005,947	653,914
Thatcher	----	----	----	----	24.5	14.0	736,383	455,110
Pilot	----	----	----	----	(*)	9.4	29	305,196
Marquis	61.2	47.1	47.1	43.0	8.4	3.0	253,272	96,188
Reward	----	----	.1	2.5	3.1	2.3	92,040	73,613
Regent	----	----	----	----	----	1.6	----	51,825
Komar	----	----	----	.2	.6	.9	19,209	29,261
Renown	----	----	----	----	(*)	.6	1,180	21,688
Carleeds	----	----	----	----	.1	.5	1,944	15,477
Marvel	----	----	.1	(*)	.3	.5	7,849	15,380
Vesta	----	----	----	----	----	.3	----	11,675
Kota	----	1.5	4.5	.6	(*)	.1	1,004	3,272
Great Northern	----	----	----	----	----	.1	----	3,015
Marquillo	----	----	(*)	(*)	.4	(*)	11,282	1,503
Hope	----	----	.1	.1	.1	(*)	2,892	795
Preston	10.3	2.0	1.1	.3	(*)	(*)	1,373	423
Apex	----	----	----	----	----	(*)	----	232
Premier	----	----	----	----	----	(*)	----	75
Mida	----	----	----	----	----	(*)	----	68
Ladoga	----	----	----	----	.2	----	6,351	----
Red Fife	.9	.1	.1	(*)	.1	----	1,949	----
Ruby	----	1.1	1.1	.3	(*)	----	1,188	----
Garnet	----	----	(*)	(*)	(*)	----	24	----
Hard red winter	----	----	2.3	5.7	5.3	6.2	158,438	203,235
Turkey	1.5	2.3	1.9	4.9	4.6	4.0	138,288	129,664
Cheyenne	----	----	----	----	(*)	1.4	646	47,079
Kanred	----	1.2	.4	.8	.3	.7	7,978	21,408
Iowin	----	----	----	----	.2	.1	6,277	4,055
Nebred	----	----	----	----	----	(*)	----	942
Nebraska No. 60	----	----	----	(*)	.2	----	4,960	----

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
South Dakota—Continued								
Durum			41.3	19.0	18.9	7.9	567,485	257,341
Durum (varieties not reported)	16.8	33.8	21.7	5.8	7.3	3.8	219,261	123,843
Peliss			.1	.6	.4	2.4	11,085	77,022
Pentad	.3	3.7	15.4	4.4	8.6	1.3	258,240	41,801
Mindum			.1	1.4	1.1	.3	34,457	9,480
Kubanka	.6	1.5	1.0	2.6	.3	.1	10,640	3,458
Acme		2.3	1.4	3.1	.1	(*)	1,874	1,350
Arnautka		.8	.1	.3		(*)		136
Golden Ball					.8		25,633	
Nodak			.1	.5	.1		2,497	
Monad		.8	1.3	.3	(*)		1,414	
White			.7	2.6	4.2	1.2	128,038	105,559
Florence		.1	.7	2.6	4.3	1.2	127,793	39,082
Others and not reported	8.4	1.7	1.2	.5	.4	.1	11,041	2,890
Total							3,006,000	3,255,000
Tennessee:							(219)	(193)
Soft red winter			100.0	100.0	100.0	100.0	388,000	491,000
Fulcaster	40.5	43.0	40.1	44.7	43.0	34.0	166,777	166,926
Currell	4.3	2.9	8.0	6.7	13.6	16.2	52,865	79,766
Flint	.1	1.8	.9	8.2	5.4	10.4	20,773	51,157
Fultz	14.0	10.8	16.8	14.6	12.8	9.7	49,790	47,446
Forward				5.1	6.1	5.7	23,732	28,146
Purplestraw	1.0	.1	2.1	.2	1.5	3.5	5,965	17,182
Mediterranean	3.4	7.1	8.0	4.6	1.9	3.5	7,134	17,045
Poole	5.4	2.2	3.0	5.5	4.7	3.5	18,214	17,024
Redhart						2.0		9,915
Rice	2.2	9.0	.3	1.0	.3	1.6	955	8,083
Leap	3.5	3.6	2.6	1.6	.7	.9	2,780	4,390
V. P. I. 131			.8	.1		.7		3,430
China						.5		2,560
Nittany			.1	.1	.7	.4	2,685	1,797
Grandprize					1.8	.4	7,029	1,778
Jones Fife		.3	.1	2.2	.3	.3	1,306	1,674
Diehl-Mediterranean	.7	1.2	1.3	.1	.3	.2	1,308	840
Red May						.1		386
Sanford						.1		280
Thorne						.1		266
Rudy						(*)		194
Hardired						(*)		105
Red Rock					.3		1,200	
Red Wave	.2	.1	.1	.1	(*)		82	
Others and not reported	24.7	17.9	14.8	5.2	6.6	6.2	25,405	30,610
Total							388,000	491,000
Texas:							(262)	(225)
Hard red winter			85.1	92.0	92.5	93.7	3,624,106	4,168,724
Tenmarq				.2	6.7	30.9	261,538	1,375,971
Blackhull		(*)	13.2	22.9	40.8	22.7	1,597,707	1,007,214
Turkey	33.9	43.5	51.4	51.6	37.7	21.6	1,476,914	961,772
Kanred		31.4	19.8	16.1	6.0	6.9	235,328	308,935
Chiefkan					.4	5.7	15,066	254,041
Early Blackhull					.5	2.9	20,303	130,789
Cheyenne					(*)	1.5	354	67,861
Red Chief						1.1		49,507
Comanche						.3		12,413
Triumph						(*)		221
Alton					(*)		366	
Soft red winter			11.8	7.1	6.8	5.9	267,047	262,926
Mediterranean	55.5	14.9	9.8	5.3	5.4	4.5	211,050	198,598
Red May	.3	.2	.1	.1	.1	.7	4,144	29,002
Denton			.5	1.2	.9	.6	33,648	24,456
Austin						.1		6,050
Fulcaster	1.8	1.7	.5	.3	.3	.1	9,966	4,462
Fairfield						(*)		358
Fultz	.9	.2	.1	.1	.2		7,259	
Durum and red durum			1.7	.7	.7	.4	27,665	17,975
Durum (varieties not reported)	1.1	1.4	1.4	.5	.6	.4	24,322	17,350
Arnautka	.6	.2	.3	.2	(*)	(*)	1,934	625
Pentad					(*)		694	
Kubanka	(*)	.1		(*)	(*)		409	
Mindum				.1	(*)		223	

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Texas—Continued								
White			(*)	0.1	(*)	(*)	122	375
Florence					(*)	(*)	122	375
Hard red spring			1.4	.1	(*)		60	
Marquis	0.1	1.0	1.2	.1	(*)		60	
Others and not reported	5.8	5.4	1.7	1.3	0.4		17,593	
Total							3,919,000	4,450,000
Utah:							(72)	(131)
Hard red winter			53.7	54.8	64.2	54.0	168,792	157,647
Turkey	31.0	46.3	38.5	38.5	15.2	31.9	39,937	93,095
Utah Kanred			7.9	13.1	15.8	7.3	41,497	21,273
Mosida						6.8		19,783
Relief				(*)	30.8	4.8	80,992	14,103
Cache						2.9		8,611
Wasatch						.3		782
White			41.7	42.0	35.5	44.5	93,262	130,018
Federation		(*)	6.9	12.8	13.9	18.2	36,610	53,193
Dicklow	1.3	13.8	18.4	16.1	10.7	9.5	28,226	27,842
Baart		1.0	1.8	3.1	3.1	7.1	8,244	20,777
Silvercoin	.6	.7	2.1	.6		2.5		7,215
Sonora	3.0	2.1	.8	.9	.5	2.4	1,353	6,914
Utac			.2	.3	1.2	1.4	3,222	4,291
Ruby			.8	.3	.4	1.0	938	2,886
Club (varieties not reported)	9.1	4.3	3.3	1.8	2.1	.5	5,488	1,569
Kofod	2.9	2.9	1.0	.5		.5		1,443
Pacific Bluestem	4.4	4.0	1.2	1.4		.5		1,386
Touse	6.9	3.1	1.8	1.2	.2	.4	440	1,073
Sevier	.3	1.1	1.1	.1	(*)	.3	50	875
Lemhi						.1		370
Goldcoin	8.5	2.6	.8	1.1	.3	.1	752	184
Erect					1.9		4,971	
Surprise	8.7	.6	.1	1.5	.2		675	
Soft red winter			1.6	1.6		1.4		4,143
Lofthouse	1.1	.3	1.0	.4		1.1		3,266
Squareheads Master						.2		555
Odessa	3.2	1.3	.1	.8		.1		322
Hard red spring			2.0	1.6	.3	.1	946	192
Marquis	5.8	2.9	1.1	1.2		.1		192
Others and not reported	13.2	13.0	11.1	5.3	3.7		9,605	
Total							263,000	292,000
Virginia:							(247)	(464)
Soft red winter			100.0	100.0	100.0	100.0	542,000	574,000
Fulcaster	38.1	54.5	38.0	38.6	30.5	21.6	165,305	124,002
Redhart				.1	.7	20.0	3,710	114,342
Leap	22.8	17.1	18.8	18.6	21.0	19.2	113,517	110,090
V. P. I. 131			11.6	16.7	17.5	16.3	94,701	93,455
Flint	4.2	5.0	5.8	8.0	8.0	6.7	43,460	38,412
Forward			.7	2.3	7.8	4.4	42,384	24,990
Purplestraw	.3	1.1	1.8	4.1	3.2	2.5	17,517	14,394
Fultz	10.5	6.5	2.3	2.9	3.6	1.6	19,423	9,427
Poole	.5	.4	.1		.6	1.2	3,390	6,705
Leapland					.1	1.0	679	5,774
Nittany			.8	1.4	1.1	.9	5,826	5,025
V. P. I. 112			4.7	1.9	1.7	.7	9,409	4,201
Hardired						.3		1,956
Red Rock						.1		729
Trumbull						.1		512
Red Wave	1.2	(*)	1.3	.7	.6	.1	3,277	377
Mediterranean	6.2	4.0	.9	.5	.3	(*)	1,423	230
Thorne						(*)		133
Fultzo-Mediterranean	.6	1.1	.7	.4	.2	(*)	1,154	91
Diehl-Mediterranean	.1		(*)		.7		3,929	
Currell	1.6	1.7	1.4	.2	.2		887	
Others and not reported	13.9	8.6	11.1	3.6	2.2	3.3	12,009	19,155
Total							542,000	574,000
Washington:							(282)	(309)
White			64.0	65.4	63.1	70.0	1,224,697	1,774,59
Baart	12.3	14.6	20.0	26.0	28.7	26.4	556,925	668,360
Federation		.1	9.9	9.8	8.1	15.6	156,206	394,999
Goldcoin	9.0	5.9	7.0	3.7	2.7	6.6	51,755	167,921

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Washington—Continued								
White—Continued								
Hymar	------	------	------	------	6.1	6.0	118,648	153,319
Golden	------	------	------	------	1.5	4.6	28,597	115,800
Rex	------	------	------	------	4.3	3.9	84,158	99,623
Hybrid 128	7.4	9.2	8.5	3.3	1.6	2.7	30,753	69,939
Pacific Bluestem	24.9	13.0	9.0	5.0	3.8	1.3	73,362	33,456
Albit	------	------	3.3	14.6	3.2	1.0	62,267	24,085
Pilcraw	------	------	.6	1.1	1.2	.6	23,170	14,600
White Federation	------	------	------	------	(*)	.3	309	6,996
Major	------	------	------	(*)	.3	.2	5,355	6,018
Jenkin	1.6	3.5	1.5	.7	.1	.2	2,586	5,224
Requa	------	------	------	------	.1	.2	991	4,424
Idaed	------	------	------	------	------	.1	----------	3,446
Alicel	------	------	------	------	------	.1	----------	2,921
Little Club	.8	(*)	.2	.1	------	.1	----------	1,301
Orfed	------	------	------	------	------	(*)	----------	618
Oregon Zimmerman	------	------	------	------	------	(*)	----------	551
Wilhelmina	------	------	------	(*)	.2	(*)	3,793	475
Big Club	.1	(*)	(*)	.1	------	(*)	----------	456
Club (varieties not reported)	4.5	2.4	1.3	.1	.1	(*)	1,999	59
Currawa	------	------	------	.3	.3	------	6,258	----------
Eickmeyer	------	------	------	------	.3	------	5,244	----------
Allen	.5	.2	------	(*)	(*)	------	631	----------
White Winter	------	.1	(*)	.1	(*)	------	393	----------
Onas	------	------	(*)	------	(*)	------	374	----------
Athena	------	------	------	------	(*)	------	374	----------
Surprise	(*)	------	.5	.1	(*)	------	316	----------
Dicklow	------	(*)	.3	.1	(*)	------	253	----------
Flomar	------	------	------	------	(*)	------	65	----------
Hard Federation	------	(*)	.4	.1	(*)	------	43	----------
Hard red winter	------	------	21.4	26.3	29.9	26.6	581,447	675,709
Turkey	7.6	24.5	15.6	20.2	21.4	24.3	415,892	614,798
Rio	------	------	------	------	.8	.8	16,274	19,312
Yogo	------	------	------	------	.7	.6	13,823	15,968
Oro	------	------	------	------	2.2	.4	42,509	10,018
Ridit	------	(*)	5.6	5.8	4.2	.3	80,931	8,599
Mosida	------	------	------	.1	.3	.1	6,059	3,580
Blackhull	------	------	------	------	------	.1	----------	2,962
Kanred	------	------	------	.3	.1	(*)	2,145	472
Tenmarq	------	------	------	------	(*)	------	34	----------
Soft red winter	------	------	11.5	6.6	5.7	2.8	110,134	70,860
Triplet	------	4.7	6.6	5.1	4.4	1.5	85,025	36,806
Red Russian	4.3	1.6	1.1	.3	.3	.6	5,167	15,768
Jones Fife	8.7	7.6	2.4	1.1	.7	.4	13,694	10,216
Hybrid 123	1.1	2.9	1.1	.1	.2	.3	4,322	6,431
Squareheads Master	------	------	------	(*)	(*)	.1	643	1,639
Hard red spring	------	------	3.1	1.7	1.3	.6	26,722	15,840
Marquis	9.3	3.3	2.6	1.6	1.3	.4	25,353	12,088
Red Bobs	------	------	.2	(*)	(*)	.1	658	1,591
Thatcher	------	------	------	------	(*)	.1	411	1,272
Komar	------	------	------	------	------	(*)	----------	846
Garnet	------	------	------	------	------	(*)	----------	43
Others and not reported	7.9	6.4	2.3	.2	.8	------	15,235	----------
Total	------	------	------	------	------	------	1,943,000	2,537,000
West Virginia:							(134)	(158)
Soft red winter	------	------	99.4	100.0	99.9	99.8	156,829	112,744
Fulcaster	29.1	36.2	50.6	41.8	24.5	37.4	38,391	42,220
Leap	3.1	7.0	15.9	16.7	28.8	36.5	45,155	41,212
Thorne	------	------	------	------	------	6.0	----------	6,779
Forward	------	------	------	.4	1.5	3.5	2,335	3,934
Fultz	16.1	8.3	8.6	15.6	16.5	3.0	25,983	3,363
Trumbull	------	.2	3.6	4.8	3.3	3.0	5,182	3,352
Nittany	------	(*)	.4	4.0	4.4	2.2	6,868	2,532
Leapland	------	------	------	------	------	2.2	----------	2,474
Fulhio	------	.1	(*)	.4	3.5	1.4	5,448	1,640
Red Wave	6.0	5.4	.8	3.0	2.2	1.4	3 532	1,597
Nigger	(*)	------	.2	.4	.2	1.0	261	1,156
Poole	13.1	7.4	6.8	7.3	5.1	1.0	7,976	1,151
Mediterranean	10.5	4.0	5.6	.9	2.8	.4	4,501	480
Redhart	------	------	------	------	------	.4	----------	392
Purplestraw	------	------	------	------	------	.3	----------	293
Rice	.3	.9	.8	1.0	1.0	.1	1,524	169
Canawa	------	------	------	------	1.7	------	2,628	----------

TABLE 1.—*Estimated percentage of the total wheat area occupied by the classes and varieties of wheat grown in each State at 5-year intervals since 1919, and the acreage in 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
West Virginia—Continued								
Soft red winter—Continued								
V. P. I. 131	------	------	(*)	0.5	0.6	------	1,004	----------
Red Clawson	------	------	------	------	.1	------	239	----------
White	------	------	------	------	.1	0.2	171	256
Dawson	------	------	------	------	.1	.2	166	256
Others and not reported	21.8	30.5	6.7	3.2	3.7	------	5,807	----------
Total	------	------	------	------	------	------	157,000	113,000
Wisconsin:							(169)	(115)
Hard red winter	------	------	22.5	14.5	41.9	53.1	38,923	36,669
Turkey	7.5	34.0	13.3	11.1	27.4	33.6	25,501	23,181
Ashkof	------	------	1.5	1.3	11.6	11.7	10,785	8,106
Minturki	------	.1	.6	.7	1.9	4.2	1,774	2,867
Marmin	------	------	------	------	------	1.8	----------	1,212
Wisconsin Pedigree No. 2	1.3	2.7	3.9	1.1	------	1.3	----------	924
Chequamegon	------	------	------	------	------	.5	----------	379
Iobred	------	------	------	------	.2	------	183	----------
Hard red spring	------	------	65.6	82.3	57.3	44.1	53,319	30,437
Progress	------	.3	25.9	53.7	33.2	24.5	30,901	16,878
Thatcher	------	------	------	------	6.4	7.6	5,966	5,260
Sturgeon	------	------	------	(*)	5.8	7.4	5,338	5,090
Marquis	59.2	34.1	33.1	23.7	9.1	4.1	8,470	2,827
Rival	------	------	------	------	------	.3	----------	203
Regent	------	------	------	------	------	.2	----------	130
Henry	------	------	------	------	------	.1	----------	42
Hope	------	------	------	.3	.1	(*)	60	5
Preston	5.1	4.0	------	2.2	1.3	(*)	1,196	2
Java	------	------	------	------	.3	------	280	----------
Ruby	------	------	------	.1	.2	------	143	----------
Marquillo	------	------	------	.1	.1	------	103	----------
Soft red winter	------	------	8.5	.9	------	2.7	----------	1,860
Fultz	.4	.6	2.6	.3	------	1.9	----------	1,316
Red May	.7	3.2	5.4	.4	------	.6	----------	400
Fultzo-Mediterranean	------	------	------	------	------	.2	----------	144
Durum and red durum	------	------	3.0	2.0	.8	.1	758	34
Durum (varieties not reported)	2.3	1.6	2.9	2.0	.7	(*)	611	34
Pentad	------	------	------	(*)	.1	------	135	----------
Others and not reported	23.5	19.4	10.9	3.0	1.6	------	1,534	----------
Total	------	------	------	------	------	------	93,000	69,000
Wyoming:							(114)	(69)
Hard red winter	------	------	40.1	50.7	41.8	62.7	156,973	164,402
Turkey	15.7	9.8	28.2	38.1	26.6	39.7	99,942	104,090
Cheyenne	------	------	------	------	2.9	13.2	10,745	34,446
Kanred	------	2.4	11.7	12.6	10.6	9.5	39,639	24,886
Nebraska No. 60	------	------	------	------	1.7	.4	6,408	980
Tenmarq	------	------	------	------	(*)	------	126	----------
Hard red spring	------	------	45.6	36.9	50.4	33.4	189,629	87,387
Marquis	34.5	65.2	42.5	33.0	38.9	15.2	146,268	39,935
Ceres	------	------	(*)	2.8	9.8	13.3	36,896	34,712
Supreme	------	------	------	------	------	3.3	----------	8,729
Thatcher	------	------	------	------	.2	1.0	883	2,566
Ruby	------	.8	.1	------	(*)	.3	81	895
Dixon	------	------	------	.1	.2	.2	655	550
Komar	------	------	------	------	1.1	------	4,323	----------
Preston	.7	------	.2	------	.1	------	355	----------
Durum	------	------	13.3	10.7	6.1	2.5	22,854	6,526
Durum (varieties not reported)	24.0	10.7	6.8	5.3	2.7	1.7	10,268	4,411
Pentad	------	.4	3.5	4.3	3.2	.8	11,873	2,057
Kubanka	------	1.5	------	.4	------	(*)	----------	58
Acme	------	3.2	3.0	.6	.2	------	691	----------
White	------	------	.9	1.5	1.7	1.2	6,438	3,087
Baart	------	.2	.3	.4	.5	1.2	1,744	3,087
Dicklow	.4	.1	.2	.4	.9	------	3,237	----------
Federation	------	------	.2	.2	.3	------	1,254	----------
Touse	.1	------	(*)	(*)	(*)	------	63	----------
Goldcoin	------	------	------	------	(*)	------	55	----------
Pacific Bluestem	------	------	------	------	(*)	------	55	----------
Soft red winter	------	------	.1	.2	(*)	.2	106	598
Baldrock	------	------	------	------	------	.2	----------	487
Odessa	.1	.5	.1	.2	(*)	(*)	106	111
Others and not reported	24.5	5.2	3.2	1.6	.1	------	333	----------
Total	------	------	------	------	------	------	376,000	262,000

The percentage in 1944 of each of the three leading varieties in each State, arranged by geographical divisions, is shown in table 2.

TABLE 2.—*Summary of percentage of the 3 most widely grown varieties of wheat in each State in 1944*

Division and State	First		Second		Third	
	Variety	Percentage of total	Variety	Percentage of total	Variety	Percentage of total
North Atlantic:						
Maine	Marquis	50.1	Red Fife	22.2	Garnet	11.8
New York	Yorkwin	86.7	Nured	4.4	Goldcoin	2.2
New Jersey	Leap	77.7	Thorne	12.0	Nittany	4.1
Pennsylvania	Nittany	35.2	Leap	20.8	Thorne	19.7
North Central:						
Ohio	Thorne	56.0	Trumbull	20.8	Fulhio	6.6
Indiana	Fultz	26.4	Rudy	13.4	Trumbull	11.1
Illinois	do	19.2	Fulhio	16.8	Turkey	11.3
Michigan	Dawson	46.3	Red Rock	14.4	Yorkwin	11.8
Wisconsin	Turkey	33.6	Progress	24.5	Ashkof	11.7
Minnesota	Rival	31.5	Regent	21.3	Thatcher	16.8
Iowa	Iowin	50.3	Iobred	25.4	Turkey	15.2
Missouri	Clarkan	38.6	Fultz	13.7	Red May	9.3
North Dakota	Thatcher	26.4	Rival	25.8	Regent	9.8
South Dakota	Rival	31.2	Ceres	20.1	Thatcher	14.0
Nebraska	Turkey	43.4	Cheyenne	22.7	Nebred	15.3
Kansas	Tenmarq	36.6	Blackhull	15.5	Turkey	14.7
South Atlantic:						
Delaware	Nittany	53.0	Leap	28.6	Fulcaster	7.2
Maryland	Leap	37.9	Nittany	19.3	Leapland	10.1
Virginia	Fulcaster	21.6	Redhart	20.0	Leap	19.2
West Virginia	do	37.4	Leap	36.5	Thorne	6.0
North Carolina	Redhart	54.6	do	10.8	Purplestraw	6.4
South Carolina	do	49.8	Purplestraw	26.8	Flint	14.8
Georgia	Purplestraw	49.4	Redhart	33.1	Sanford	12.9
South Central:						
Kentucky	Fultz	40.6	Currell	18.8	Fulcaster	11.7
Tennessee	Fulcaster	34.0	do	16.2	Flint	10.4
Alabama	Purplestraw	80.3	Sanford	9.8	do	4.1
Mississippi	Flint	40.5	Hardired	19.5	Redhart	18.0
Arkansas	Red May	44.7	Fulcaster	21.6	Mediterranean	20.4
Oklahoma	Tenmarq	40.3	Blackhull	16.9	Turkey	15.0
Texas	do	30.9	do	22.7	do	21.6
Western:						
Montana	Marquis	28.4	Thatcher	22.5	Turkey	18.9
Idaho	Turkey	31.7	Federation	10.6	Lemhi	10.2
Wyoming	do	39.7	Marquis	15.2	Ceres	13.3
Colorado	do	26.8	Tenmarq	22.6	Blackhull	17.2
New Mexico	Blackhull	67.8	Turkey	22.3	Thatcher	3.2
Arizona	Baart	57.9	do	18.3	Baart 38	14.6
Utah	Turkey	31.9	Federation	18.2	Dicklow	9.5
Nevada	Federation	30.2	Baart	25.3	Turkey	19.5
Washington	Baart	26.4	Turkey	24.3	Federation	15.6
Oregon	Rex	27.5	Goldcoin	14.4	do	11.3
California	White Federation 38.	33.1	Baart 38	27.3	Bunyip	8.2

The estimated acreage for 1944 and 1939 and the percentage of the total wheat acreage occupied by each variety in the United States by 5–year intervals are shown in table 3. In this table the varieties are arranged alphabetically. Here again only those varieties reported in 1944 or 1939 are shown.

TABLE 3.—*Estimated percentage of the total wheat area occupied by each of the wheat varieties of the United States at 5-year intervals since 1919, and the acreage for 1939 and 1944*

[The asterisk (*) indicates a variety reported as grown, but an estimate of acreage either was not given or if given was less than 0.01 percent of the total wheat acreage of the United States]

Variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Acme	------	0.13	0.12	0.18	(*)	(*)	2,565	1,786
Albit	------	------	.13	.64	0.20	0.04	125,776	26,169
Alicel	------	------	------	------	(*)	.10	2,596	62,643
Allen	0.02	.01	(*)	(*)	(*)	------	631	------
Alton	.01	(*)	.03	.01	.22	(*)	140,705	1,215
Apex	------	------	------	------	(*)	.03	637	22,884
Arco	------	------	------	.02	(*)	------	547	------
Arnautka	.02	.05	.03	.03	.01	(*)	6,842	761
Ashkof	------	------	(*)	(*)	.02	.01	10,785	8,106
Ashland	------	(*)	.01	.01	(*)	.01	396	5,384
Athena	------	------	------	------	(*)	(*)	1,079	316
Austin	------	------	------	------	------	.01	------	6,050
Baart	.69	.95	1.24	1.30	1.39	1.27	889,325	831,098
Baart 38	------	------	------	------	------	.25	------	166,557
Baldrock	------	------	------	.04	.17	.13	108,664	84,993
Berkeley Rock	------	------	.03	.04	.01	.01	6,765	3,872
Big Club	.03	.04	.01	.06	.05	.04	34,321	24,248
Blackhull	(*)	2.99	9.77	11.11	12.72	7.05	8,127,624	4,602,088
Bluechaff	(*)	(*)	(*)	(*)	(*)	------	810	------
Brill	------	------	------	------	.01	.05	7,748	30,691
Bunyip	(*)	.06	.19	.12	.15	.07	94,448	49,103
Canadian Red	(*)	------	------	------	(*)	------	167	------
Canawa	------	------	------	------	(*)	------	2,628	------
Cache	------	------	------	------	------	.02	------	13,840
Canus	------	------	------	------	------	.01	------	3,348
Carleeds	------	------	------	------	.14	.07	90,958	47,526
Carala	------	------	------	------	------	.01	------	7,247
Carleton	------	------	------	------	------	.01	------	6,113
Ceres	------	------	.56	7.31	5.61	2.47	3,583,500	1,622,762
Chequamegon	------	------	------	------	------	(*)	------	379
Cheyenne	------	------	------	.07	1.16	2.13	743,525	1,398,982
Chiefkan	------	------	------	------	.75	2.67	478,219	1,752,751
China	.09	.11	.02	.01	.01	.02	4,877	13,237
Clarkan	------	------	------	------	.23	1.37	144,565	902,199
Climax	.02	.01	.01	(*)	(*)	------	474	------
Club (varieties not reported)	.53	.32	.20	.04	.03	.01	17,391	4,650
Comanche	------	------	------	------	------	.03	------	21,522
Cooperatorka	------	------	------	.06	(*)	------	259	------
Cornell 595	------	------	------	------	------	(*)	------	1,126
Coronation	------	------	------	------	(*)	------	2,182	------
Currawa	------	------	------	.01	.01	------	6,258	------
Currell	.88	.51	.69	.79	.69	.50	440,550	329,804
Dawson	.17	.12	.07	.58	.59	.70	379,556	460,897
Defiance	.27	.07	.07	.06	.02	(*)	10,535	3,176
Denton	------	------	.03	.08	.05	.04	33,648	24,456
Dicklow	.23	.23	.41	.29	.22	.13	139,704	87,077
Diehl-Mediterranean	.16	.12	.06	.08	.01	(*)	9,499	1,344
Dixon	(*)	------	.02	.06	.01	(*)	3,570	657
Durum [1] (varieties not reported)	5.78	6.06	5.61	1.92	2.35	1.55	1,499,791	1,016,948
Eagle Chief	------	------	.01	.03	.07	------	46,064	------
Early Blackhull	------	------	(*)	.13	.51	2.56	329,095	1,680,732
Early Premium	------	------	------	------	.07	.05	46,970	32,462
Eickmeyer	------	------	------	------	.01	------	5,244	------
Enid	------	------	------	------	.01	------	7,756	------
Erect	------	------	------	------	.01	------	4,971	------
Escondido	------	------	(*)	.03	.02	(*)	15,925	1,107
Fairfield	------	------	------	------	------	.06	------	37,873
Federation	------	.06	1.21	1.14	.93	1.06	591,940	694,254
Flint	.13	.20	.11	.29	.21	.27	134,849	178,934
Flomar	------	------	------	------	(*)	------	65	------
Florence	------	.02	.21	.20	.22	.07	142,298	46,584
Forward	------	.01	.25	.42	.50	.38	320,179	248,378
Fulcaster	3.53	3.57	2.26	2.29	1.91	1.24	1,223,308	815,267
Fulhio	------	.16	.41	.88	1.36	.66	868,743	432,550
Fultz	6.59	3.51	2.33	3.07	2.28	1.87	1,455,911	1,212,835
Fultzo-Mediterranean	.42	.17	.07	.06	.01	.04	7,713	28,498
Galgalos	.05	.03	.02	.02	.03	.03	19,209	18,085

[1] Includes durum and red durum classes.

TABLE 3.—*Estimated percentage of the total wheat area occupied by each of the wheat varieties of the United States at 5-year intervals since 1919, and the acreage for 1939 and 1944*—Continued

Variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Garnet	------	------	0.01	0.02	0.01	(*)	4,010	990
Gasta	------	------	------	(*)	(*)	(*)	3,426	1,123
Gipsy	0.17	0.16	.04	.07	.01	(*)	9,186	1,102
Gladden	.01	.20	.07	.06	.05	0.01	29,665	8,038
Goens	.18	.20	.04	.11	.14	.09	92,648	57,431
Goldcoin	1.30	1.32	1.44	.72	.42	.66	267,501	434,320
Golden	------	------	------	(*)	.06	.25	38,522	164,824
Golden Ball	------	------	------	------	.05	------	30,000	------
Grandprize	.05	.03	(*)	(*)	.01	.01	7,331	4,313
Great Northern	------	------	------	------	.02	.05	11,698	30,506
Greeson	.01	.02	.02	.02	.02	.02	10,709	13,296
Gypsum	.01	(*)	------	(*)	(*)	------	950	------
Hard Federation	------	.03	.10	.02	.01	.02	6,799	10,522
Hard Federation 31	------	------	------	.01	.01	------	8,981	------
Hardired	------	------	------	------	------	.07	------	45,202
Harvest Queen	1.38	.79	.58	.62	.28	.03	177,923	19,223
Haynes Bluestem	2.14	.26	.12	.04	(*)	(*)	1,282	544
Henry	------	------	------	------	------	(*)	------	42
Honor	------	.01	.03	.11	.06	.01	37,073	7,811
Hood	------	------	------	(*)	(*)	------	906	------
Hope	------	------	.01	.03	.05	(*)	32,446	1,412
Humpback	.04	(*)	(*)	(*)	------	(*)	------	538
Huston	.03	.05	.01	.02	.02	.01	12,456	5,106
Hybrid 63	.05	.02	------	.01	(*)	(*)	2,876	341
Hybrid 123	.04	.10	.04	.01	.01	.01	4,322	6,431
Hybrid 128	.40	.82	.58	.23	.07	.16	46,362	106,645
Hybrid 143	.07	.03	.02	.01	(*)	------	1,089	------
Hymar	------	------	------	------	.20	.31	126,919	204,672
Idaed	------	------	------	------	(*)	.07	638	43,782
Illinois No. 2	------	------	------	(*)	.02	.02	11,511	12,672
Ilred	------	.02	.04	.01	.01	.01	3,801	4,633
Iobred	------	(*)	.17	.19	.76	.33	488,074	217,517
Ioturk	------	------	.01	.02	.03	.01	16,405	7,291
Iowin	------	------	(*)	.01	.17	.18	107,206	116,841
Java	.03	.02	.03	.03	.03	.01	21,988	5,293
Jenkin	.09	.22	.15	.08	.03	.02	16,110	13,651
Jones Fife	.65	.41	.27	.19	.10	.04	64,821	24,795
Kahla	.03	.09	.05	(*)	(*)	(*)	785	1,063
Kanhull	------	------	------	------	------	(*)	------	1,165
Kanred	.14	8.48	5.60	4.81	2.41	1.56	1,538,573	1,023,024
Karmont	------	(*)	.14	.15	.18	.29	114,148	190,394
Kawvale	------	------	------	.07	1.91	1.22	1,219,226	804,235
Kentucky R 47	------	------	------	------	------	(*)	------	2,570
Kinney	.03	.02	.02	.01	------	(*)	------	1,732
Kitchener	------	.01	.01	.01	(*)	(*)	2,671	275
Kofod	.01	.01	(*)	(*)	------	(*)	------	1,443
Komar	------	------	------	.02	.17	.09	107,158	61,951
Kota	------	.93	.40	.10	.01	.01	8,772	4,097
Kruse	------	------	------	(*)	(*)	------	390	------
Kubanka	.07	.94	1.17	1.13	.68	.27	431,630	180,217
Ladoga	.03	.01	.02	(*)	.01	------	6,351	------
Leap	.72	1.01	1.09	1.16	1.05	1.00	669,509	659,553
Leapland	------	------	------	------	.01	.07	4,736	48,861
Lemhi	------	------	------	------	(*)	.17	185	108,374
Little Club	.15	.04	.03	.05	------	(*)	------	2,945
Lofthouse	.01	(*)	.01	.01	.01	.01	4,022	6,359
Lynn	.01	------	------	(*)	(*)	------	115	------
Mackey	------	------	------	.01	(*)	------	833	------
Major	------	------	------	(*)	.01	.01	5,355	6,018
Mammoth Red	.01	.01	.09	.07	.04	.04	25,764	28,047
Marmin	------	------	------	------	------	.01	------	3,240
Marquillo	------	------	.02	.22	.22	.03	143,698	16,958
Marquis	16.10	18.89	19.02	13.96	5.05	2.33	3,224,867	1,529,428
Martin	.05	.01	(*)	.01	(*)	------	198	------
Marvel	------	------	.01	.02	.05	.03	33,938	17,000
Mealy	.09	.02	.01	(*)	(*)	(*)	676	2,748
Mediterranean	3.80	1.18	.88	.85	.61	.50	387,338	331,228
Mercury	------	------	------	------	------	(*)	------	70
Michikof	------	.10	.22	.15	.15	.05	93,178	32,341
Mida	------	------	------	------	------	.03	------	18,552
Mindum	------	.02	.52	.73	1.18	1.03	756,329	678,486
Minturki	------	.07	.14	.27	.24	.25	152,855	164,602
Monad	------	.17	.15	.03	.01	------	3,647	------
Montana No. 36	(*)	.04	.05	.03	.04	.02	24,500	15,256
Mosida	------	------	.02	.03	.04	.06	23,594	42,389

TABLE 3.—*Estimated percentage of the total wheat area occupied by each of the wheat varieties of the United States at 5-year intervals since 1919, and the acreage for 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Nabob	-------	-------	(*)	(*)	0.01	(*)	5,479	412
Nebraska No. 60	-------	0.03	0.56	1.07	.67	0.29	430,051	187,464
Nebred	-------	-------	-------	-------	.01	.88	7,770	580,954
Newthatch	-------	-------	-------	-------	-------	(*)	----------	2,217
Newturk	-------	-------	.02	.04	.08	.09	49,470	59,023
Nigger	0.38	.39	.20	.25	.19	.12	123,949	81,650
Nittany	-------	.51	.64	.67	.79	.70	504,972	461,762
Nodak	-------	(*)	.06	.03	.01	-------	4,389	----------
Nured	-------	-------	-------	-------	-------	.03	----------	19,380
Oakley	(*)	(*)	(*)	-------	(*)	(*)	657	2,531
Odessa	.07	.04	.01	.01	(*)	(*)	188	433
Onas	-------	-------	.03	.05	.06	.07	38,250	48,573
Oregon Zimmerman	-------	-------	.01	.02	.03	.02	17,402	12,466
Orfed	-------	-------	-------	-------	-------	(*)	----------	618
Oro	-------	-------	(*)	.01	.08	.02	54,288	10,857
Pacific Bluestem	1.87	.73	.59	.27	.20	.08	129,782	52,859
Pacific Bluestem 37	-------	-------	-------	-------	(*)	.02	1,327	12,628
Pawnee	-------	-------	-------	-------	-------	.02	----------	11,200
Peliss	(*)	.01	.01	.04	.02	.12	13,186	77,022
Pentad	.07	.67	1.62	.51	.96	.30	613,082	196,405
Pilcraw	(*)	-------	.02	.04	.04	.02	26,743	15,227
Pilot	-------	-------	-------	-------	(*)	1.85	1,993	1,217,009
Poole	3.37	2.06	.97	1.10	.58	.32	368,512	208,188
Portage	.01	.11	.02	.04	.01	(*)	6,812	524
Poso	-------	-------	-------	(*)	.04	.01	23,126	7,348
Power	.01	.10	.03	.03	(*)	-------	1,017	----------
Powerclub	-------	.01	(*)	.01	(*)	-------	59	----------
Prairie	-------	-------	-------	-------	-------	(*)	----------	244
Premier	-------	-------	-------	-------	-------	.04	----------	27,543
Preston	3.06	.77	.46	.21	.03	(*)	18,690	2,700
Progress	-------	(*)	.05	.15	.09	.03	57,637	18,677
Propo	.03	.02	.03	(*)	(*)	-------	392	----------
Prosperity	.06	(*)	.01	.01	.03	(*)	16,214	2,909
Purdue No. 1	-------	-------	-------	(*)	.08	.06	54,277	36,651
Purkof	-------	-------	.32	.49	.56	.24	355,647	158,753
Purplestraw	.38	.23	.24	.50	.47	.46	298,035	303,426
Ramona	-------	-------	-------	(*)	.01	.02	8,682	14,854
Red Bobs	-------	.03	.03	.01	.02	.01	9,793	5,248
Redchaff	.05	.01	.01	.01	.01	(*)	3,744	2,259
Red Chief	-------	-------	-------	-------	-------	1.24	----------	817,562
Red Clawson	.11	.04	.02	.03	.02	(*)	10,880	2,790
Red Fife	1.03	.34	.05	.03	.01	(*)	3,884	445
Redhart	-------	-------	(*)	.19	.43	1.05	276,442	690,421
Redhull	-------	-------	.01	.14	.24	.05	154,807	36,108
Red Indian	-------	(*)	-------	-------	.01	(*)	5,393	638
Red May	1.60	.79	1.29	1.60	.93	.58	594,566	378,079
Red Rock	.30	.67	.42	.36	.25	.25	160,141	163,212
Red Russian	.21	.10	.09	.04	.02	.03	11,340	21,880
Red Wave	1.53	.86	.41	.50	.26	.18	167,632	121,278
Regent	-------	-------	-------	-------	-------	2.03	----------	1,333,725
Reliance	-------	-------	(*)	(*)	-------	(*)	----------	1,659
Reliant	-------	-------	-------	-------	-------	.01	----------	6,022
Relief	-------	-------	-------	(*)	.14	.03	87,487	20,375
Renown	-------	-------	-------	-------	.08	.83	51,509	542,329
Requa	-------	-------	-------	-------	(*)	.01	1,138	4,424
Reward	-------	-------	.01	.38	.31	.36	197,308	236,943
Rex	-------	-------	-------	-------	.58	.68	370,159	449,787
Rice	.04	.11	.01	.02	.06	.02	40,149	10,793
Ridit	-------	(*)	.27	.26	.21	.08	132,526	49,201
Rink	.02	.04	.05	.01	.01	(*)	5,007	1,614
Rio	-------	-------	-------	(*)	.03	.05	18,361	29,979
Rival	-------	-------	-------	-------	(*)	6.17	1,011	4,050,900
Ruby	-------	.65	.30	.13	.01	.01	4,602	3,819
Rudy	.56	.49	.31	.35	.36	.31	229,060	203,345
Russian	-------	.04	.03	.01	.04	.04	25,337	24,278
Russian Red	.24	.10	.10	.05	.01	.07	3,559	46,067
Sanett	-------	-------	-------	-------	-------	(*)	----------	482
Sanford	-------	-------	-------	-------	-------	.05	----------	33,970
Sea Island	.02	.05	.01	.01	.01	-------	8,470	----------
Sevier	(*)	(*)	(*)	(*)	(*)	(*)	50	875
Shepherd	-------	-------	.01	(*)	(*)	-------	238	----------
Sherman	-------	-------	(*)	.01	(*)	(*)	2,543	1,824
Sibley No. 81	-------	-------	-------	.04	.12	(*)	74,077	1,500
Silvercoin	(*)	(*)	.01	(*)	-------	.01	----------	7,215
Sonora	.37	.17	.15	.08	.04	.02	23,250	15,921
Sonora 37	-------	-------	-------	-------	(*)	-------	241	----------

TABLE 3.—*Estimated percentage of the total wheat area occupied by each of the wheat varieties of the United States at 5-year intervals since 1919, and the acreage for 1939 and 1944*—Continued

State, class, and variety	Percentage						Acreage	
	1919	1924	1929	1934	1939	1944	1939	1944
Squareheads Master	-------	-------	-------	(*)	(*)	(*)	643	2,194
Stanley	-------	-------	-------	-------	-------	(*)	-------	235
Stewart	-------	-------	-------	-------	-------	0.02	-------	12,389
Sturgeon	-------	-------	-------	(*)	0.01	.01	5,459	5,090
Supreme	-------	-------	0.48	0.31	.17	.07	110,018	48,509
Surprise	0.08	0.03	.04	.01	(*)	(*)	2,755	71
Tenmarq	-------	-------	-------	.29	5.51	13.31	3,522,378	8,744,053
Thatcher	-------	-------	-------	(*)	8.64	6.78	5,524,631	4,450,254
Thorne	-------	-------	-------	-------	.01	2.42	3,239	1,587,783
Touse	.03	.02	.01	(*)	(*)	(*)	503	1,073
Triplet	-------	.20	.27	.20	.15	.07	93,850	43,882
Triumph	-------	-------	-------	-------	-------	.11	-------	72,459
Trumbull	(*)	1.17	1.46	1.86	2.01	.90	1,285,464	590,448
Turkey	29.63	28.18	25.69	24.80	19.77	12.63	12,637,403	8,295,881
Ukrainka	-------	-------	-------	(*)	.01	(*)	8,307	1,340
Union	-------	-------	-------	-------	(*)	-------	974	-------
Utac	-------	-------	(*)	(*)	.01	.01	3,960	4,291
Utah Kanred	-------	-------	.03	.04	.08	.03	48,382	21,273
Valley	.01	.01	(*)	.01	.01	-------	8,643	-------
Valprize	-------	-------	-------	.01	.03	(*)	17,435	2,722
Vesta	-------	-------	-------	-------	-------	.59	-------	386,057
V. P. I. 112	-------	-------	.05	.02	.01	.01	9,409	4,201
V. P. I. 131	-------	-------	.13	.18	.15	.16	97,151	103,258
Wabash	-------	-------	-------	-------	(*)	.07	649	46,806
Wasatch	-------	-------	-------	-------	-------	(*)	-------	2,992
Wheedling	.01	.01	(*)	.01	-------	(*)	-------	1,350
White Federation	-------	(*)	.06	.17	.36	.07	227,704	47,978
White Federation 38	-------	-------	-------	-------	-------	.30	-------	197,840
White Fife	-------	-------	-------	-------	-------	(*)	-------	83
White Winter	.07	.06	.04	.03	.04	.05	23,446	32,612
Wilhelmina	-------	-------	.04	.06	.06	.09	36,436	57,003
Wisconsin Pedigree No. 2	.01	.01	.01	(*)	.02	.01	10,382	3,182
Yogo	-------	-------	-------	-------	.05	.23	34,794	150,924
Yorkwin	-------	-------	-------	-------	.19	.69	122,261	452,777
Others and not reported	7.25	3.89	2.56	2.17	1.74	.81	1,112,896	532,424
Total	100.00	100.00	100.00	100.00	100.00	100.00	63,911,000	65,684,000

The varieties grown on a million acres or more in each of the six surveys are listed in table 4 in the order of their importance.

TABLE 4.—*Varieties of wheat grown to the extent of more than a million acres, listed in order of acreage at 5-year periods since 1919*

Rank	1919	1924	1929	1934	1939	1944
1	Turkey	Turkey	Turkey	Turkey	Turkey	Tenmarq.
2	Marquis	Marquis	Marquis	Marquis	Blackhull	Turkey.
3	Fultz	Kanred	Blackhull	Blackhull	Thatcher	Blackhull.
4	Mediterranean	Fulcaster	Kanred	Ceres	Ceres	Thatcher.
5	Fulcaster	Fultz	Fultz	Kanred	Tenmarq	Rival.
6	Poole	Blackhull	Fulcaster	Fultz	Marquis	Chiefkan.
7	Preston	Poole	Pentad	Fulcaster	Kanred	Early Blackhull.
8	Haynes Bluestem	-------	-------	Trumbull	Fultz	Ceres.
9	Pacific Bluestem	-------	-------	-------	Trumbull	Thorne.
10	Red May	-------	-------	-------	Fulcaster	Marquis.
11	Red Wave	-------	-------	-------	Kawvale	Cheyenne.
12	Harvest Queen	-------	-------	-------	-------	Regent.
13	-------	-------	-------	-------	-------	Pilot.
14	-------	-------	-------	-------	-------	Fultz.
15	-------	-------	-------	-------	-------	Kanred.

This is the first time in the series of surveys that Turkey has not had the largest estimated acreage. Tenmarq, which ranked fifth in 1939, replaced Turkey as the leading variety in 1944. Blackhull, which ranked second in 1939, was in third place in 1944, while

Thatcher dropped from third to fourth place. For a number of years Marquis ranked second to Turkey in importance, but by 1939 it had dropped to sixth and in 1944 to tenth place. A number of varieties appear in this list for the first time; for example, Rival, Chiefkan, Early Blackhull, Thorne, Cheyenne, Regent, and Pilot. This list emphasizes the change that is taking place in the wheat varietal picture in the United States.

Of the 216 varieties reported in 1944, 15 occupied more than 1 million acres each; 23 from 250,000 to 1,000,000 acres each; 35 from 50,000 to 250,000 acres each; and 144 occupied less than 50,000 acres each. This indicates that a number of varieties are rapidly increasing in importance and are being grown on land formerly occupied by such standard wheats as Turkey and Marquis. It also indicates that a large number of varieties are grown on very limited acreages, due to one or more of several reasons. In some cases a variety may be well adapted to only a very small area. New varieties may fail to replace old ones entirely because of lack of adaptability or lack of widespread knowledge of the merits of the new varieties.

In general, new varieties are being introduced about as rapidly as the old ones drop out. It would seem desirable to have a smaller number of more widely adapted varieties, and the breeding work now being carried on has this objective in view. The three leading varieties in each State in 1944 are listed in table 2. Turkey is the leading variety in six States, second in three, and third in six. Tenmarq leads in three States and is second in one, while Blackhull leads in one State, is second in three, and third in one. Fultz, a soft wheat, ranks first in three States and second in one, while Leap was first in two and second in four States. Such varieties as Marquis, Rival, Nittany, Fulcaster, Redhart, and Baart are leading varieties in more than one State each.

The data in tables 3 and 4 show that Tenmarq, Turkey, Blackhull, and Thatcher were the most extensively grown varieties in 1944. Together they comprise nearly 40 percent of the total wheat acreage of the United States. The only other varieties approaching these in importance are Rival, Chiefkan, and Early Blackhull, in the order named. The 15 varieties listed in table 4, each being grown on more than a million acres in 1944, occupied 67.89 percent of the total wheat acreage of the United States.

Changes in the distribution of the varieties are constantly taking place. During the 5-year period 1939 to 1944 the following varieties increased most: Tenmarq from 3,522,378 to 8,744,053 acres, or from 5.51 to 13.31 percent; Rival from a trace to 6.17 percent; Thorne from 0.01 to 2.42 percent; Regent from 0 to 2.0 percent, and Early Blackhull from 0.51 to 2.56 percent. The greatest decreases were Turkey, 19.77 to 12.63 percent; Blackhull, 12.72 to 7.05; Marquis, 5.05 to 2.33; and Ceres, from 5.61 to 2.47.

CLASSES OF WHEAT

According to the official grain standards of the United States, wheat is now separated into seven commercial classes: (1) Hard red spring, (2) durum, (3) red durum, (4) hard red winter, (5) soft red winter, (6) white, and (7) mixed wheat. Most of the classes

have two or three subclasses, and each subclass has five numerical grades and a sample grade. All varieties are included in one or another of the seven classes. In order to show the relative importance and distribution of the different classes, the acreages of the varieties making up each class were totaled. In this report the durum and red durum acreages are tabulated together, as only one variety and a small acreage of red durum are grown. The acreage for 1944 of each class and its percentage of the entire wheat acreage for each crop-reporting district and each State, arranged by geographical divisions, are shown in table 5 and summarized in table 6. The location and number of each crop-reporting district is shown in figure 2.

In table 5 the acreage of "Others and not reported" is distributed among the classes in proportions determined by the acreages of varieties reported; thus the total wheat acreage of each State was accounted for. This distribution was made by crop-reporting districts.

TABLE 5.—*Estimated acreage and percentage of the total wheat area occupied by each of the classes of wheat grown in each State in 1944*

[The asterisk (*) indicates a class reported as grown but occupying less than 0.1 percent of the total wheat acreage of the district or State]

Division, State, and district	Hard red spring		Durum and red durum		Hard red winter		Soft red winter		White		Total acreage
	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	
North Atlantic:											
Maine:											
1	1,796	95.6							83	4.4	1,879
2	86	100.0									86
3	35	100.0									35
Total	1,917	95.9							83	4.1	2,000
New York:											
2							133	22.2	467	77.8	600
3	100	33.3							200	66.7	300
4	108	(*)					15,755	6.0	248,237	94.0	264,100
5	797	1.7					2,235	4.8	43,468	93.5	46,500
6							176	2.6	6,624	97.4	6,800
7	1,923	9.5					2,967	14.6	15,410	75.9	20,300
8	8	(*)					1,256	5.6	21,136	94.4	22,400
9							2,608	42.1	3,592	57.9	6,200
9A							959	53.3	841	46.7	1,800
Total	2,936	.8					26,089	7.1	339,975	92.1	369,000
New Jersey:											
2							27,947	96.4	1,053	3.6	29,000
5							32,000	100.0			32,000
8					68	0.5	13,932	99.5			14,000
Total					68	.1	73,879	98.5	1,053	1.4	75,000
Pennsylvania:											
1					58	.2	30,688	99.0	244	.8	30,990
2					713	2.0	30,777	85.7	4,400	12.3	35,890
3	9	.8			80	7.0	841	73.8	210	18.4	1,140
4					1,747	2.2	76,262	97.0	641	.8	78,650
5					37	(*)	193,780	98.9	2,223	1.1	196,040
6							64,932	97.9	1,428	2.1	66,360
7					518	.8	68,110	98.8	272	.4	68,900
8							240,600	100.0			240,600
9							213,889	96.6	7,541	3.4	221,430
Total	9	(*)			3,153	.3	919,879	97.9	16,959	1.8	940,000

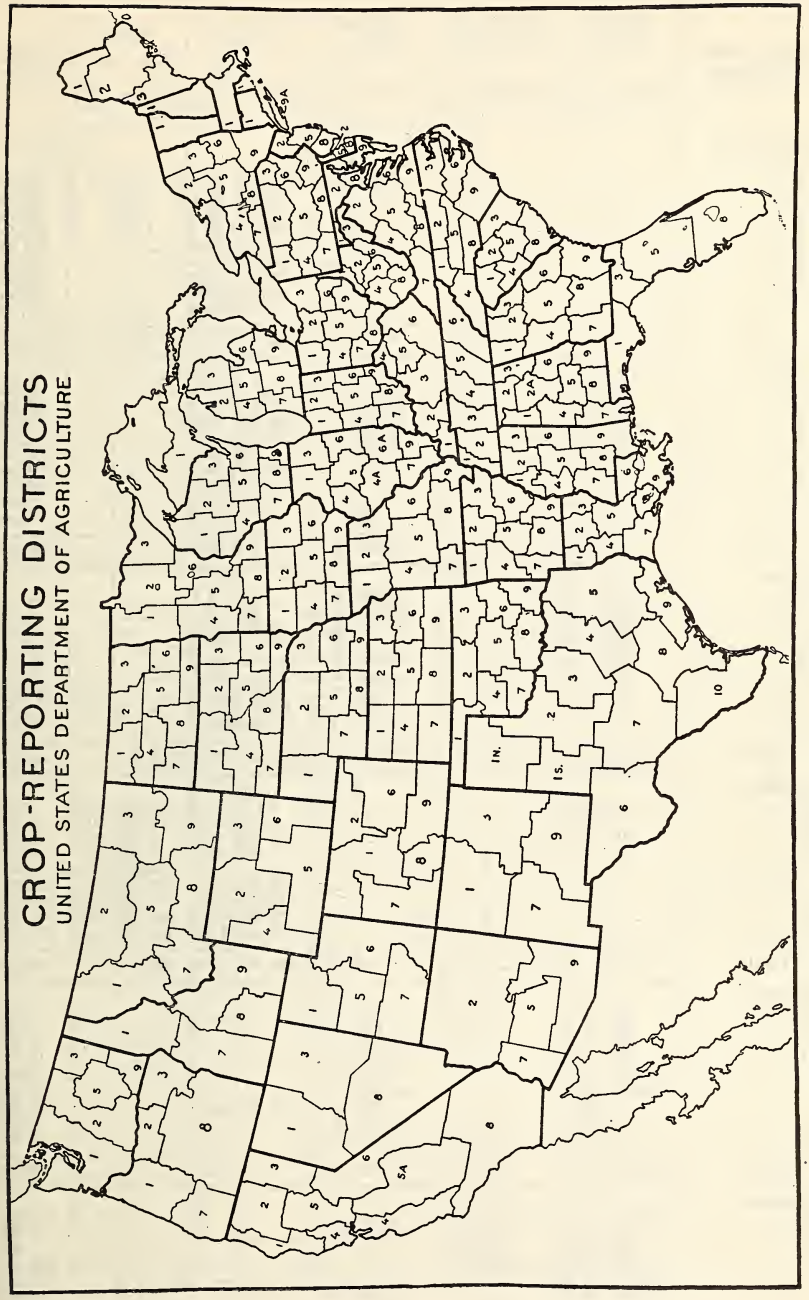

FIGURE 2.—Crop-reporting districts in 1944 within the States of the United States.

TABLE 5.—*Estimated acreage and percentage of the total wheat area occupied by each of the classes of wheat grown in each State in 1944*—Continued

Division, State, and district	Hard red spring		Durum and red durum		Hard red winter		Soft red winter		White		Total acreage
	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	
North Central:											
Ohio:											
1					6,420	2.0	301,348	94.4	11,432	3.6	319,200
2							319,956	99.7	1,044	.3	321,000
3							198,781	99.8	319	.2	199,100
4					178	.1	283,680	99.3	1,742	.6	285,600
5							416,000	100.0			416,000
6							97,500	100.0			97,500
7							226,500	100.0			226,500
8							105,800	100.0			105,800
9							87,300	100.0			87,300
Total					6,598	.3	2,036,865	99.0	14,537	.7	2,058,000
Indiana:											
1	585	0.6			92,057	96.2	3,058	3.2			95,700
2	138	.1			34,519	22.1	121,343	77.8			156,000
3	138	.1			20,902	13.1	138,860	86.8			159,900
4	139	.1			18,742	16.8	92,819	83.1			111,700
5	107	(*)			21,534	7.8	255,459	92.2			277,100
6					7,140	6.2	107,160	93.8			114,300
7							251,200	100.0			251,200
8							72,900	100.0			72,900
9					525	.5	98,675	99.5			99,200
Total	1,107	.1			195,419	14.6	1,141,474	85.3			1,338,000
Illinois:											
1	1,311	5.7			20,983	90.4	906	3.9			232,000
3	4,900	31.8			10,100	65.6	400	2.6			15,400
4	303	.4			40,355	56.4	30,942	43.2			71,600
4A	602	.2			74,937	21.1	278,561	78.7			354,100
5	405	.3			70,640	55.2	56,855	44.5			127,900
6	101	.4			18,012	81.9	3,887	17.7			22,000
6A	404	.3			47,521	37.0	80,475	62.7			128,400
7					873	.2	413,315	97.8	8,812	2.0	423,000
9					13,495	7.4	167,905	92.6			181,400
Total	8,026	.6			296,916	22.0	1,033,246	76.7	8,812	.7	1,347,000
Michigan:											
1	1,281	22.8					2,078	36.9	2,271	40.3	5,630
2	124	.9			42	.3	6,775	48.8	6,939	50.0	13,880
3	308	2.0					8,086	51.4	7,336	46.6	15,730
4							11,303	67.7	5,397	32.3	16,700
5									65,560	100.0	65,560
6							30,081	20.2	118,919	79.8	149,000
7							57,132	38.5	91,368	61.5	148,500
8							128,698	40.8	187,002	59.2	315,700
9							86,118	35.8	154,182	64.2	240,300
Total	1,713	.2			42	(*)	330,271	34.0	638,974	65.8	971,000
Wisconsin:											
1	644	15.6	34	0.8	3,452	83.6					4,130
2	420	27.6			1,100	72.4					1,520
3	740	17.6			3,460	82.4					4,200
4	5,410	34.9			10,110	65.1					15,520
5	2,300	46.6			2,640	53.4					4,940
6	10,603	50.0			10,607	50.0					21,210
7	980	24.7			1,120	28.3	1,860	47.0			3,960
8	5,540	70.4			2,330	29.6					7,870
9	3,800	67.3			1,850	32.7					5,650
Total	30,437	44.1	34	.1	36,669	53.1	1,860	2.7			69,000
Minnesota:											
1	661,653	91.7	53,647	7.4	6,300	.9					721,600
2	6,116	52.3	306	2.6	5,278	45.1					11,700
3	720	80.0	180	20.0							900
4	322,780	97.8	7,320	2.2							330,100
5	67,033	55.3	1,156	1.0	52,911	43.7					121,100
6	3,315	17.8			15,285	82.2					18,600

TABLE 5.—*Estimated acreage and percentage of the total wheat area occupied by each of the classes of wheat grown in each State in 1944*—Continued

Division, State, and district	Hard red spring		Durum and red durum		Hard red winter		Soft red winter		White		Total acreage
	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	
North Central—Continued											
Minnesota—Con.											
7	16,170	88.8	1,180	6.5	850	4.7					18,200
8	19,557	40.5			28,743	59.5					48,300
9	16,858	28.8			41,642	71.2					58,500
Total	1,114,202	83.8	63,789	4.8	151,009	11.4					1,329,000
Iowa:											
1	2,124	59.8			1,426	40.2					3,550
2	370	56.1			290	43.9					660
3	640	32.2			1,350	67.8					1,990
4	2,682	5.3	159	.1	47,529	94.1			130	0.1	50,500
5	131	1.4			9,269	98.6					9,400
6	339	6.8			4,631	93.2					4,970
7	76	.2			51,058	99.7	66	0.1			51,200
8	40	.3			14,080	99.7					14,120
9	30	.1			23,437	99.3	143	.6			23,610
Total	6,432	4.0	159	.1	153,070	95.7	209	.1	130	.1	160,000
Missouri:											
1			2,270	1.0	79,187	35.9	139,543	63.1			221,000
2					755	.7	115,245	99.3			116,000
3					14,045	16.3	71,955	83.7			86,000
4					11,361	5.8	184,639	94.2			196,000
5					6,814	2.4	277,186	97.6			284,000
6					1,185	.3	372,815	99.7			374,000
7							214,000	100.0			214,000
8							66,000	100.0			66,000
9					5,544	3.5	151,456	96.5			157,000
Total			2,270	.1	118,891	7.0	1,592,839	92.9			1,714,000
North Dakota:											
1	1,469,803	95.6	67,197	4.4							1,537,000
2	867,677	69.6	379,323	30.4							1,247,000
3	910,079	55.5	729,921	44.5							1,640,000
4	953,776	97.6	23,224	2.4							977,000
5	762,908	72.8	285,092	27.2							1,048,000
6	881,393	88.9	110,431	11.1	176	(*)					992,000
7	964,967	99.5	2,929	.3	1,258	.1			846	.1	970,000
8	776,541	95.5	35,327	4.4	1,132	.1					813,000
9	774,035	82.5	163,965	17.5							938,000
Total	8,361,179	82.3	1,797,409	17.7	2,566	(*)			846	(*)	10,162,000
South Dakota:											
1	294,721	94.2	4,961	1.6	11,406	3.6			1,872	.6	312,960
2	1,119,179	97.7	24,196	2.1	2,345	.2					1,145,720
3	453,211	87.2	66,477	12.8	52	(*)					519,740
4	194,520	88.2	13,836	6.3	11,448	5.2			726	.3	220,530
5	304,538	93.0	3,245	1.0	4,989	1.5			14,858	4.5	327,630
6	104,644	81.6	19,780	15.4	576	.4			3,310	2.6	128,310
7	70,020	54.3	1,424	1.1	57,556	44.6					129,000
8	112,415	32.5	123,171	35.7	108,542	31.4			1,352	.4	345,480
9	102,094	81.3	251	.2	6,321	5.0			16,964	13.5	125,630
Total	2,755,342	84.7	257,341	7.9	203,235	6.2			39,082	1.2	3,255,000
Nebraska:											
1	69,454	8.0	886	.1	800,760	91.9					871,100
2	5,654	26.1	2,116	9.8	13,880	64.1					21,650
3	4,735	15.3	180	.6	25,710	82.8			415	1.3	31,040
5	1,264	.6	276	.1	226,410	99.3					227,950
6	2,120	.4			537,140	99.6					539,260
7	1,360	.2			740,860	99.8					742,220
8	4,440	.9			499,820	99.1					504,260
9	1,100	.1			731,024	95.3	35,396	4.6			767,520
Total	90,127	2.4	3,458	.1	3,575,604	96.5	35,396	1.0	415	(*)	3,705,000

TABLE 5.—*Estimated acreage and percentage of the total wheat area occupied by each of the classes of wheat grown in each State in 1944*—Continued

Division, State, and district	Hard red spring		Durum and red durum		Hard red winter		Soft red winter		White		Total acreage
	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	
North Central—Continued											
Kansas:											
1	2,688	0.2			1,424,122	99.8					1,426,810
2					1,565,801	97.0	49,199	3.0			1,615,000
3					181,265	47.3	201,735	52.7			383,000
4	477	(*)			1,316,123	100.0					1,316,600
5					2,209,009	98.2	39,991	1.8			2,249,000
6					110,234	34.8	206,866	65.2			317,100
7	3,384	.1			2,507,196	99.8	2,010	.1			2,512,590
8					2,835,631	99.2	24,369	.8			2,860,000
9					168,821	39.9	254,079	60.1			422,900
Total	6,549	.1			12,318,202	94.0	778,249	5.9			13,103,000
South Atlantic:											
Delaware:											
2							25,400	100.0			25,400
5							32,500	100.0			32,500
8							10,100	100.0			10,100
Total							68,000	100.0			68,000
Maryland:											
1							6,300	100.0			6,300
2							44,900	100.0			44,900
3							166,200	100.0			166,200
4							102,800	100.0			102,800
5							39,100	100.0			39,100
6							41,700	100.0			41,700
Total							401,000	100.0			401,000
Virginia:											
2							163,000	100.0			163,000
4							62,000	100.0			62,000
5							123,000	100.0			123,000
6							44,000	100.0			44,000
7							82,000	100.0			82,000
8							67,000	100.0			67,000
9							33,000	100.0			33,000
Total							574,000	100.0			574,000
West Virginia:											
2							18,744	98.7	256	1.3	19,000
4							21,000	100.0			21,000
6							73,000	100.0			73,000
Total							112,744	99.8	256	.2	113,000
North Carolina:											
1							29,000	100.0			29,000
2							101,504	97.6	2,496	2.4	104,000
3							23,000	100.0			23,000
4							31,000	100.0			31,000
5							173,378	97.9	3,622	2.1	177,000
6							38,600	100.0			38,600
8							148,269	95.0	7,731	5.0	156,000
9							55,000	100.0			55,000
Total							599,151	97.7	13,849	2.3	613,000
South Carolina:											
1							115,000	100.0			115,000
2							23,000	100.0			23,000
3							42,000	100.0			42,000
4							50,000	100.0			50,000
5							47,000	100.0			47,000
8							13,000	100.0			13,000
Total							290,000	100.0			290,000

TABLE 5.—*Estimated acreage and percentage of the total wheat area occupied by each of the classes of wheat grown in each State in 1944*—Continued

Division, State, and district	Hard red spring		Durum and red durum		Hard red winter		Soft red winter		White		Total acreage
	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	
South Atlantic—Continued											
Georgia:											
1							9,570	100.0			9,570
2							57,380	100.0			57,380
3							56,850	100.0			56,850
4							33,750	100.0			33,750
5							46,550	100.0			46,550
6							25,420	100.0			25,420
7							8,710	100.0			8,710
8							4,360	100.0			4,360
9							410	100.0			410
Total							243,000	100.0			243,000
South Central:											
Kentucky:											
1							54,660	100.0			54,660
2							174,320	100.0			174,320
3							107,563	98.9	1,167	1.1	108,730
4							31,490	100.0			31,490
5					4,071	3.4	114,308	96.5	61	.1	118,440
6							24,360	100.0			24,360
Total					4,071	.8	506,701	99.0	1,228	.2	512,000
Tennessee:											
1							13,000	100.0			13,000
2							13,000	100.0			13,000
3							75,000	100.0			75,000
4							165,000	100.0			165,000
5							39,000	100.0			39,000
6							186,000	100.0			186,000
Total							491,000	100.0			491,000
Alabama:											
1							440	100.0			440
2							8,600	100.0			8,600
2A							800	100.0			800
3							2,300	100.0			2,300
4							340	100.0			340
5							490	100.0			490
6							4,220	100.0			4,220
7							150	100.0			150
8							140	100.0			140
9							520	100.0			520
Total							18,000	100.0			18,000
Mississippi:											
1					1,925	11.7	14,475	88.3			16,400
2							1,750	100.0			1,750
3							150	100.0			150
4							6,300	100.0			6,300
5							200	100.0			200
6							200	100.0			200
Total					1,925	7.7	23,075	92.3			25,000
Arkansas:											
1							17,200	100.0			17,200
2					1,425	33.1	2,875	66.9			4,300
3							39,700	100.0			39,700
4							1,300	100.0			1,300
5							900	100.0			900
6					36	3.0	1,164	97.0			1,200
7							200	100.0			200
8											
9							200	100.0			200
Total					1,461	2.2	63,539	97.8			65,000

TABLE 5.—*Estimated acreage and percentage of the total wheat area occupied by each of the classes of wheat grown in each State in 1944*—Continued

Division, State, and district	Hard red spring		Durum and red durum		Hard red winter		Soft red winter		White		Total acreage
	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	
South Central—Continued											
Oklahoma:											
1					1,201,000	100.0					1,201,000
2					1,713,521	96.0	71,479	4.0			1,785,000
3					47,674	34.8	89,326	65.2			137,000
4					754,000	100.0					754,000
5					533,920	92.9	41,080	7.1			575,000
6					7,210	42.4	9,790	57.6			17,000
7					706,000	100.0					706,000
8					25,160	83.9	4,840	16.1			30,000
9							1,000	100.0			1,000
Total					4,988,485	95.8	217,515	4.2			5,206,000
Texas:											
1-N					3,196,000	100.0					3,196,000
1-S					94,000	100.0					94,000
2					589,300	100.0					589,300
3			300	0.2	154,102	83.3	30,498	16.5			184,900
4			8,925	2.8	103,847	32.2	209,228	65.0			322,000
7			6,125	10.6	31,475	54.5	20,200	34.9			57,800
8			2,625	43.8			3,000	50.0	375	6.2	6,000
Total			17,975	.4	4,168,724	93.7	262,926	5.9	375	(*)	4,450,000
Western:											
Montana:											
1	25,069	27.5			39,094	43.0	3,965	4.4	22,872	25.1	91,000
2	955,297	64.6	13,269	.9	510,434	34.5					1,479,000
3	1,396,517	96.2	17,057	1.2	37,426	2.6					1,451,000
5	212,393	33.8			416,595	66.2			12	(*)	629,000
7	41,524	43.7			49,942	52.6			3,534	3.7	95,000
8	148,878	49.5			148,673	49.4	1,000	.3	2,449	.8	301,000
9	235,533	88.1			31,467	11.8					267,000
Total	3,015,211	69.9	30,326	.7	1,233,631	28.6	4,965	.1	28,867	.7	4,313,000
Idaho:											
1	14,766	5.0			21,329	7.3	8,064	2.8	247,441	84.9	291,600
7					5,771	9.2	1,330	2.1	55,599	88.7	62,700
8	1,370	1.2			42,987	36.2			74,343	62.6	118,700
9	37,790	6.5			325,625	55.8	4,099	.7	215,486	37.0	583,000
Total	53,926	5.1			395,712	37.5	13,493	1.3	592,869	56.1	1,056,000
Wyoming:											
1	9,292	76.8	1,608	13.3	1,200	9.9					12,100
2	36,405	44.5	595	.7	44,413	54.2	487	.6			81,900
3	713	15.5			689	15.0	111	2.4	3,087	67.1	4,600
4	1,500	41.7			2,100	58.3					3,600
5	39,477	24.7	4,323	2.7	116,000	72.6					159,800
Total	87,387	33.4	6,526	2.5	164,402	62.7	598	.2	3,087	1.2	262,000
Colorado:											
1	9,962	25.1			27,210	68.5	180	.4	2,388	6.0	39,740
2	77,257	16.8			381,882	83.1	78	(*)	243	.1	459,460
6	44,930	5.4			780,520	94.6					825,450
7	19,679	33.2			34,846	58.7	204	.3	4,601	7.8	59,330
8	18,765	90.8			460	2.2			1,445	7.0	20,670
9	8,730	4.3			194,620	95.7					203,350
Total	179,323	11.2			1,419,538	88.3	462	(*)	8,677	.5	1,608,000
New Mexico:											
1	14,552	47.6			16,048	52.4					30,600
3	8,036	2.7			289,864	97.3					297,900
7	592	20.2			1,309	44.7			1,029	35.1	2,930
9									2,570	100.0	2,570
Total	23,180	6.9			307,221	92.0			3,599	1.1	334,000

TABLE 5.—*Estimated acreage and percentage of the total wheat area occupied by each of the classes of wheat grown in each State in 1944*—Continued

Division, State, and district	Hard red spring		Durum and red durum		Hard red winter		Soft red winter		White		Total acreage
	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	Acreage	Percent	
Western—Con.											
Arizona:											
2	123	1.3			5,496	59.8			3,581	38.9	9,200
5									12,100	100.0	12,100
7									1,000	100.0	1,000
9									3,700	100.0	3,700
Total	123	.5			5,496	21.1			20,381	78.4	26,000
Utah:											
1					102,608	57.2	4,143	2.3	72,549	40.5	179,300
5					39,820	53.7			34,280	46.3	74,100
6	192	.7			13,032	48.6			13,576	50.7	26,800
7					2,187	18.5			9,613	81.5	11,800
Total	192	.1			157,647	54.0	4,143	1.4	130,018	44.5	292,000
Nevada:											
1	610	4.1			3,253	21.7			11,097	74.2	14,960
3					200	8.9			2,060	91.1	2,260
8					50	6.4			730	93.6	780
Total	610	3.4			3,503	19.5			13,887	77.1	18,000
Washington:											
1	3,487	22.9					10,644	70.1	1,069	7.0	15,200
2					47,726	20.4	13,886	6.0	171,888	73.6	233,500
3	4,117	2.4			2,936	1.7	5,382	3.2	156,965	92.7	169,400
5	2,397	.2			506,115	39.0	2,508	.2	785,480	60.6	1,296,500
9	5,839	.7			118,932	14.5	38,440	4.7	659,189	80.1	822,400
Total	15,840	.6			675,709	26.6	70,860	2.8	1,774,591	70.0	2,537,000
Oregon:											
1	7,579	8.0					1,411	1.5	85,280	90.5	94,270
2					73,938	16.2	340	.1	380,362	83.7	454,640
3	678	.2			4,344	1.3			322,778	98.5	327,800
7									11,490	100.0	11,490
8	1,557	1.8			39,197	44.6			47,046	53.6	87,800
Total	9,814	1.0			117,479	12.0	1,751	.2	846,956	86.8	976,000
California:											
1									1,500	100.0	1,500
2					1,252	5.5			21,348	94.5	22,600
3					1,758	11.1			14,142	88.9	15,900
4									144,400	100.0	144,400
5									126,600	100.0	126,600
5A									220,100	100.0	220,100
6									11,300	100.0	11,300
8									53,600	100.0	53,600
Total					3,010	.5			592,990	99.5	596,000

TABLE 6.—*Estimated acreage and percentage of the total wheat area of the United States occupied by each of the 5 classes of wheat*

Class	Total wheat area occupied						1939	1944
	1919	1924	1929	1934	1939	1944		
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Acres*	*Acres*
Hard red spring	24.2	22.4	22.0	23.2	20.9	24.0	13,330,648	15,765,582
Durum [1]	6.4	8.2	9.4	4.6	5.3	3.3	3,372,405	2,179,258
Hard red winter	32.0	41.4	43.5	44.6	47.6	46.8	30,456,919	30,709,456
Soft red winter	30.1	22.1	17.7	20.9	19.6	18.2	12,552,634	11,937,179
White	7.3	5.9	7.4	6.7	6.6	7.7	4,198,394	5,092,525
Total	100.0	100.0	100.0	100.0	100.0	100.0	63,911,000	65,684,000

[1] Includes durum and red durum classes.

Hard red spring wheat as a class is grown in all but the South Atlantic and South Central divisions, but principally in the North Central States. In 1944 it was reported in 23 States and was the leading class in Minnesota, North Dakota, South Dakota, and Montana.

Durum wheat is grown in the same general divisions, but principally in North Dakota, South Dakota, and Minnesota. A small acreage of durum is grown as far south as Texas. It is not a leading class of wheat in any State, occupying 17.7 percent of the acreage in North Dakota, 7.9 percent of that in South Dakota, 4.8 percent of that in Minnesota, and 2.4 percent of that in Wyoming. In addition to the above States some durum wheat was reported in Montana, Nebraska, Wisconsin, Iowa, Missouri, and Texas. In all, durum wheat was grown in 10 States in 1944.

Hard red winter wheat was reported being grown in all divisions except the South Atlantic, and its total acreage was twice that of any other class of wheat. It is grown principally in the North Central and South Central States and is the leading class of wheat in Kansas, Nebraska, Oklahoma, Texas, Wisconsin, Iowa, Wyoming, Colorado, New Mexico, and Utah. It was reported in 30 States in 1944, although the greatest acreages occurred in Kansas, Nebraska, Oklahoma, Texas, and Colorado.

Soft red winter wheat is grown in all divisions. It is the leading class of wheat in New Jersey, Pennsylvania, Ohio, Illinois, Indiana, Missouri, Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Kentucky, Tennessee, Alabama, and Mississippi. In many of the Eastern States it is practically the only class of wheat grown. The largest acreages were estimated for Ohio, Missouri, Indiana, Illinois, and Pennsylvania. A total of 33 States reported soft red winter wheat in 1944.

White wheat is also grown in all divisions, but chiefly in the far Western States and in New York and Michigan. Only a very small acreage was reported from the South Central States. It is the leading class of wheat in New York and Michigan in the East and Idaho, Washington, Oregon, California, Arizona, and Nevada in the West. The largest acreages were in Washington, Oregon, Michigan, California, Idaho, and New York.

The estimated acreage and percentage of the total wheat area occupied by each class by 5-year intervals since 1919 are shown in table 6. These acreages were determined by totaling the estimated acreages of the varieties in each class. These data indicate that from 1939 to 1944 there was a decrease in the acreage of durum, hard red winter, and soft red winter and an increase in hard red spring and white wheats. The greatest change was in hard red spring which increased from 20.9 to 24.0 percent of the total. Since 1929 the percentage of durum has gradually decreased, and in 1944 this class occupied only 3.3 percent of the total. The percentage of hard red winter wheat increased gradually from 1919 until 1939 but has shown a slight decrease during the last 5 years. The acreage of soft red winter wheat has decreased slightly since 1934. In the case of white wheat, there has been no marked change in the relative importance of the class.

White wheat occupied 5.9 percent of the total wheat area in 1924, and in 1944 it was 7.7 percent of the total. These two figures represent the highest and lowest percentage recorded for this class of wheat. The shifts in the relative proportion of the different classes of wheat are caused largely by changes in the acreage of all wheat in different areas where the particular classes are grown rather than by changes in the classes of wheat grown within a locality.

Hard Red Spring Varieties

The hard red spring varieties are grown principally in the north-central part of the United States, their production extending into the prairie Provinces of Canada. There the winters are too severe for production of the present varieties of winter wheat. Varieties of spring wheat also are grown in certain parts of Wisconsin, Iowa, Illinois, and as far east as Maine. In these States, as well as in Nebraska, Kansas, Colorado, and Wyoming, they are frequently used to replace winter wheat that has failed, due to winterkilling, drought, soil blowing, or other causes. Hard red spring wheat also occupies a limited acreage in the Pacific Northwest. The distribution of the acreage of hard red spring wheat in 1944 is shown in figure 3.

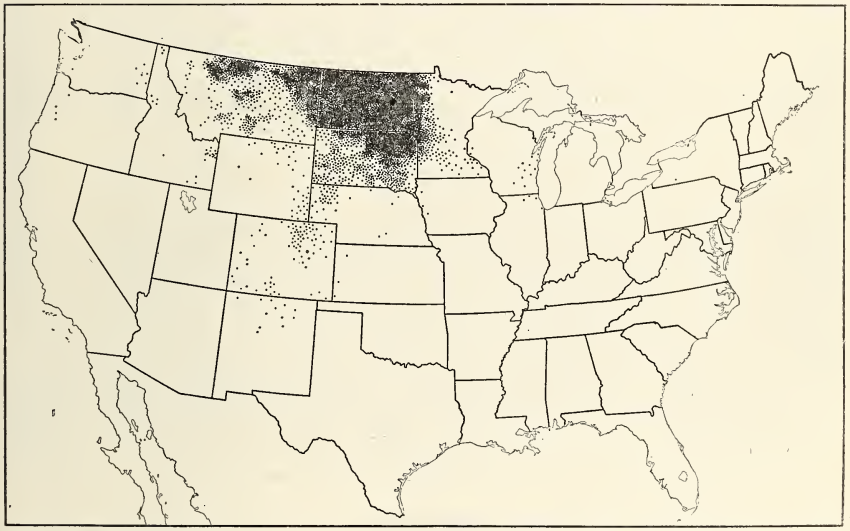

Figure 3.—Distribution of hard red spring wheat in 1944. Each dot represents 2,000 acres. Estimated area, 15,765,582 acres.

In 1944, 40 varieties of hard red spring wheat were reported. They are listed in table 7 in the order of the estimated acreage. The percentage of the total acreage for the class occupied by each variety in 1919, 1924, 1929, 1934, 1939, and 1944 are also shown.

TABLE 7.—*Percentage of the total hard red spring wheat acreage occupied by each variety of that class in the United States at 5-year intervals since 1919, and the estimated acreage for 1944*

[The asterisk (*) indicates the variety was reported as grown, but an estimate of acreage was not given or if given was less than 0.1 percent of the total acreage of the class]

Variety	Percentage of acreage						Acreage, 1944
	1919	1924	1929	1934	1939	1944	
Thatcher				(*)	41.6	28.3	4,450,254
Rival					(*)	25.8	4,050,900
Ceres			2.6	31.5	27.0	10.3	1,622,762
Marquis	71.4	85.4	87.4	60.2	24.3	9.7	1,529,428
Regent						8.5	1,333,725
Pilot					(*)	7.7	1,217,009
Renown					.4	3.5	542,329
Vesta						2.5	386,057
Reward			.1	1.6	1.5	1.5	236,943
Komar				.1	.8	.4	61,951
Supreme			2.2	1.3	.8	.3	48,509
Carleeds					.7	.3	47,526
Great Northern					.1	.2	30,506
Premier						.2	27,543
Apex					(*)	.2	22,884
Progress		(*)	.2	.7	.4	.1	18,677
Mida						.1	18,552
Marvel			(*)	.1	.3	.1	17,000
Marquillo			.1	1.0	1.1	.1	16,958
Java	.1	.1	.1	.1	.2	.1	5,293
Red Bobs		.1	.1	.1	.1	.1	5,248
Huston	.1	.2	.1	.1	.1	(*)	5,106
Sturgeon				(*)	(*)	(*)	5,090
Kota		4.2	1.9	.4	.1	(*)	4,097
Ruby		2.9	1.4	.5	(*)	(*)	3,819
Canus						(*)	3,348
Preston	13.6	3.5	2.1	.9	.1	(*)	2,700
Newthatch						(*)	2,217
Kinney	.2	.1	.1	.1		(*)	1,732
Reliance			(*)	(*)		(*)	1,659
Hope			(*)	.1	.2	(*)	1,412
Garnet			.1	.1	(*)	(*)	990
Dixon	(*)		(*)	.3	(*)	(*)	657
Haynes Bluestem	9.5	1.2	.6	.2	(*)	(*)	544
Humpback	.2	(*)	.1	(*)		(*)	538
Red Fife	4.6	1.6	.2	.1	(*)	(*)	445
Kitchener		(*)	(*)	(*)	(*)	(*)	275
Stanley						(*)	235
Mercury						(*)	70
Henry						(*)	42
Sea Island	.1	.1	.1	(*)	.1		
Ladoga	.1	(*)	.1	(*)	.1		
Coronation					(*)		
Power	.1	.5	.1	.1	(*)		
Varieties not reported in 1939 and 1944	(*)	.1	.3	.4			
Total reported	100.0	100.0	100.0	100.0	100.0	100.0	15,725,030
Varieties not reported							40,552
Total							15,765,582

THATCHER

Thatcher increased from 1,823 acres in 1934, when it was released by the Minnesota Agricultural Experiment Station, to 5,524,631 acres in 1939 to become the leading variety of spring wheat. It retained that position in 1944, although its acreage had dropped to 4,450,254 acres, or 13.2 percent. It constituted 28.3 percent of the acreage of this class. It was reported in 14 States—North Dakota, South Dakota, Montana, and Minnesota having the largest acreage. The rapid increase was due largely to resistance to stem rust, while the decrease in recent years has been due to injury from leaf rust. In the United

States the acreage of Thatcher has decreased in Minnesota and the eastern Dakotas but increased in Montana, Wyoming, and Colorado. In Canada, during the same 5-year period, it decreased in Manitoba but increased in Saskatchewan and Alberta. It has been estimated by the Searle Grain Company [4] that 12,142,000 acres were grown in Canada in 1944. This is an increase of 3,163,000 acres over its 1939 acreage. This increase has been largely in Saskatchewan. For the United States and Canada combined this is a total of 16,600,000 acres, which is a gain of more than 2 million acres. The distribution of Thatcher wheat in the United States in 1944 is shown in figure 4.

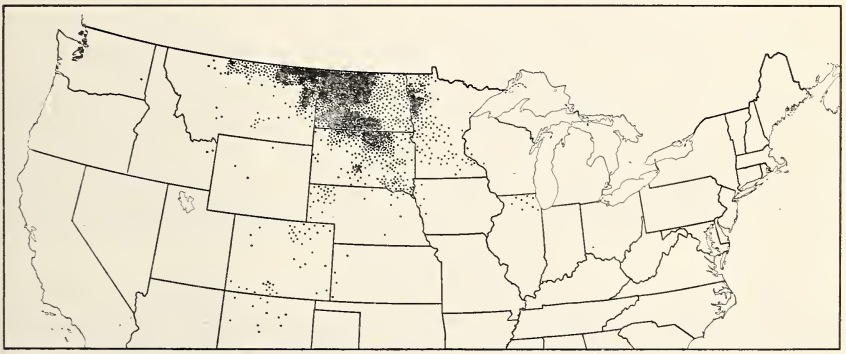

FIGURE 4.—Distribution of Thatcher in 1944. Each dot represents 1,000 acres. Estimated area, 4,450,254 acres.

RIVAL

Rival increased from 1,011 acres in 1939, when it was distributed by the North Dakota Agricultural Experiment Station, to 4,050,900 acres in 1944 to become the second most widely grown variety of its class. It replaced Thatcher in many places because of its greater resistance to leaf rust and its higher yield. As it has a tendency to shatter in some seasons, Rival is grown more in the eastern section of the spring-wheat region. The map shows that Rival was grown in four States in 1944 (fig. 5) and occupied 25.8 percent of the class acreage.

CERES

Ceres ranked third in acreage in 1944, having decreased from 27.0 to 10.3 percent of the class, or nearly 2 million acres from 1934. It was largely replaced by varieties more resistant to stem rust, particularly Thatcher, Rival, Pilot, and Regent. Ceres was developed at the North Dakota Agricultural Experiment Station and distributed to farmers in 1926. By 1929 the estimated area was 347,632 acres, or 2.6 percent of the class. In 1934 it had increased to 4,453,487 acres, when it ranked second only to Marquis. By 1939 the acreage had shifted westward

[4] SEARLE GRAIN COMPANY, LIMITED. GRAIN MARKET FEATURES: THATCHER STILL FURTHER INCREASES ITS LEAD. Searle Grain Co. Pam. 14 (14): [6] pp., with supplement. 1944.

with a marked decrease in eastern North Dakota and in Minnesota and an increase in South Dakota and Montana. In 1944 Ceres had largely disappeared from the eastern section of North Dakota. The distribution of Ceres wheat in 1944 is shown in figure 6. This variety was severely damaged by stem rust in eastern South Dakota in 1944 and in the future should be confined to sections where stem and leaf rust do not occur. In the drier areas of Montana Ceres has generally outyielded the newer rust-resistant varieties, and because of its heavy test weight the Montana acreage has decreased only slightly.

MARQUIS

Marquis dropped from third to fourth place in rank during the 5-year period from 1939 to 1944. From 1919 to 1934 Marquis was the leading variety. Its acreage was probably first surpassed by Ceres between 1935 and 1938, by Thatcher in 1939, and by Rival in 1944. Owing to the severe stem rust epidemics of 1935, 1937, and 1938 the acreage of both Ceres and Marquis decreased rapidly, Thatcher and newer resistant varieties taking their place. In 1944 Marquis was grown in 14 States on an estimated area of 1,529,428 acres, as shown in figure 7. This was a decrease from 24.3 to 9.7 percent of the acreage of the class.

There was a sharp reduction in the acreage of Marquis in North Dakota, South Dakota, and Montana during the last 5-year period. In the three prairie Provinces of Canada Marquis also lost first place to Thatcher. In 1944 the Canadian acreage of Marquis was about 3,500,000 acres.

REGENT

Regent was developed by the Canadian Department of Agriculture at the Dominion Rust Research Laboratory, Winnipeg, Manitoba. It

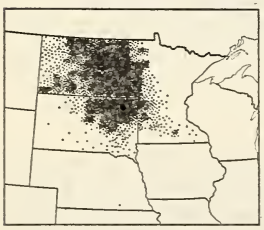

FIGURE 5.—Rival.
4,050,900 acres.

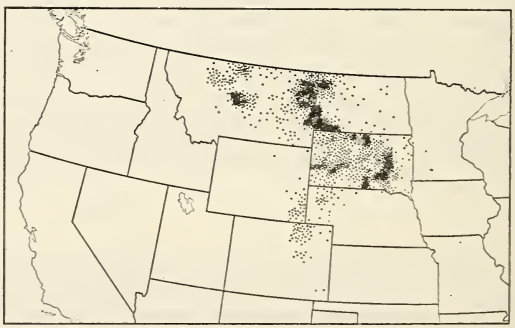

FIGURE 6.—Ceres.
1,622,762 acres.

was released for growing by Canadian farmers in 1939 and was first grown in the United States in 1940. It is an awnless stiff-strawed variety of excellent quality and is best adapted to the heavier soils and where lodging is a frequent factor. During the 5 years from 1940 to 1944 the acreage of Regent in the United States increased to 1,333,725

FIGURE 7.—Marquis.
1,529,428 acres.

acres—8.5 percent of the acreage of the class—as shown in figure 8. It is grown in four States, principally North Dakota. In Canada the acreage of Regent totaled about 1,120,000 acres in 1944, principally in Manitoba, where it ranks second only to Thatcher.

PILOT

Pilot was developed by the United States Department of Agriculture in cooperation with State agricultural experiment stations of the spring-wheat region. It was distributed for growing in North Dakota, South Dakota, and Montana in 1939, in which year the survey showed 1,993 acres. Pilot is bearded and resistant to both stem and leaf rust. It does not have so strong a straw as Ceres, but it is a high-yielding variety having excellent milling and baking properties. An improved strain, Pilot 13, was distributed in 1941 and 1942. The increase from both lots was rapid, and in 1944 the estimated acreage, as shown in figure 9, was 1,217,009 acres. This may be somewhat lower than its 1943 acreage, as with the favorable seasons some of the Pilot acreage in the eastern section had been replaced by stronger strawed wheats. Westward, however, there had been a steady increase in the acreage of Pilot. The map shows it to be grown in four States—North Dakota, South Dakota, Montana, and Minnesota. The acreage is 7.7 percent of the class, ranking sixth among the varieties grown.

RENOWN

Renown, developed by the Canadian Department of Agriculture at the Dominion Rust Research Laboratory, Winnipeg, Manitoba, is early, awnless, and resistant to rust and smut. It was distributed to

Canadian growers in 1937 and has been grown in the United States since 1938. In 1939 there was an estimated area of 51,509 acres, and in 1944, as shown in figure 10, it was 542,329 acres. This acreage may be somewhat less than that grown in 1943 or even 1942, as some of the acreage of Renown has been replaced by Regent and other newer wheats. It increased from tenth to seventh in rank during the 5-year period, however, and made up 3.5 percent of the acreage of the class. The acreage is in three States, principally North Dakota. In Canada the 1944 acreage of Renown was about 700,000 acres, principally in Manitoba, where it ranks third among the varieties grown. In the United States, Renown should be replaced by Regent or other newer varieties.

VESTA

Vesta was developed by the North Dakota Agricultural Experiment Station and was distributed in 1942. It is bearded and resistant to stem rust, but it is rather susceptible to leaf rust, however, and has weak straw. Its quality also is not entirely satisfactory. With the distribution of Mida wheat in 1944, therefore, Vesta is not now recommended. The acreage of Vesta increased in western North Dakota and spread to South Dakota and Montana, where its estimated area, as shown in figure 11, equaled 386,057 acres. This makes up 2.5 percent of the acreage of the class, ranking eighth among the varieties grown.

REWARD

Reward was developed by the Canadian Department of Agriculture and distributed in 1927. It was first grown in the United States in 1928; in 1929 it was reported grown on 6,520 acres, principally in South Dakota. In 1934 it was the third most important variety of hard red spring wheat, although it occupied only 230,952 acres, or 1.6 percent of the class. Because of stem rust injury the acreage of Reward dropped to 197,308 in 1939, but it increased slightly by 1944

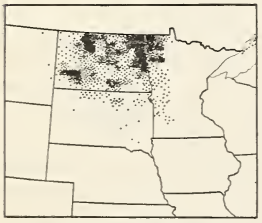

FIGURE 8.—Regent. 1,333,725 acres.

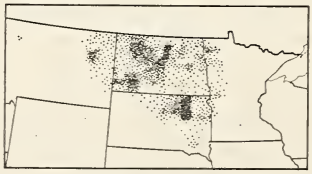

FIGURE 9.—Pilot. 1,217,009 acres.

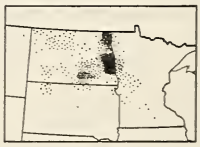

FIGURE 10.—Renown. 542,329 acres.

when, as shown in figure 12, its area was estimated at 236,943 acres. The increase has occurred in Montana and to a small extent in Colorado where rust does not occur usually and an early wheat is desired. The acreage of Reward decreased sharply in North Dakota and South Dakota, where rust damage had been severe, but increased in Montana where its early maturity had a decided advantage during the hot,

dry seasons that prevailed. Another advantage of Reward is its attractive dark plump kernels. The 1944 acreage of Reward in Canada was about 200,000, principally in Alberta.

OTHER VARIETIES OF HARD RED SPRING WHEAT

The discussion so far has been confined to 9 varieties that have an estimated area of 200,000 acres or more. Of the remaining 35 listed in table 7, 23 decreased in acreage, which includes 4 that were completely eliminated. The acreage of the following increased from 1939 to 1944: Great Northern, Premier, Apex, Mida, Canus, Newthatch, Kinney, Reliance, Humpback, Stanley, Mercury, and Henry. Three of these—Kinney, Reliance, and Humpback—are old varieties that had been grown previously, but were not reported in 1939. The other 9 are new or reported grown for the first time in the 1944 survey. Of these, Mida, Newthatch, and Henry are considered to be promising by agronomists of the agricultural experiment stations of the region. In addition, Cadet wheat, not listed in the survey but increased in 1944 and distributed in 1945, is approved.

Of 45 hard red spring wheats, only 10 are recommended for the northern hard spring wheat region of the United States. In the order of their 1944 acreages these varieties are Thatcher, Rival, Ceres, Marquis, Regent, Pilot, Reward, Mida, Newthatch, and Cadet.

Durum and Red Durum Varieties

The durum and red durum varieties are grown principally in eastern North Dakota and South Dakota and occupy a part of the same territory in which the hard red spring wheats are grown. The 1944 acreage was estimated at 2,179,258, as compared with 3,372,405 in 1939. The decrease of 2 percent in the durum wheat acreage of the United States during the 5-year period is due to several reasons, but principally to the development of rust-resistant varieties of hard red spring wheat.

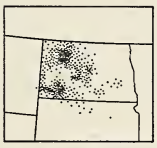

FIGURE 11.—Vesta.
386,057 acres.

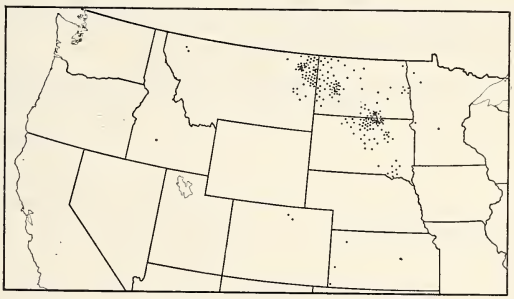

FIGURE 12.—Reward.
236,943 acres.

Nine varieties were reported grown in 1944. The estimated acreage in 1944 and the percentage of the total durum and red durum area occu-

pied by the varieties by 5-year intervals since 1919 are given in table 8. The distribution of all durum and red durum wheat is shown in figure 13.

The identity of the varietal name of much of the durum and red durum wheat grown is not known to the growers, for the word "durum"

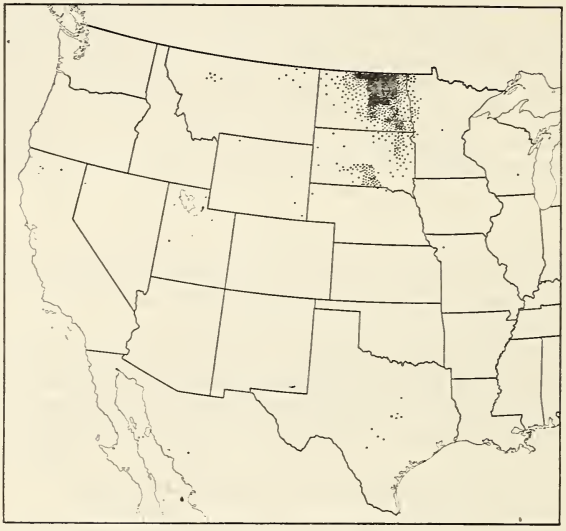

FIGURE 13.—Durum and red durum. 2,179,258 acres.

is considered by many a varietal name. For this reason, nearly half of the total durum acreage was shown as "Durum (varieties not reported)."

TABLE 8.—*Percentage of the total durum and red durum wheat acreage occupied by each variety of that class in the United States at 5-year intervals since 1919, and the estimated acreage for 1944*

[The asterisk (*) indicates the variety was reported as grown, but an estimate of acreage was not given or if given was less than 0.1 percent of the total acreage of the class]

Variety	Percentage of acreage						Acreage, 1944
	1919	1924	1929	1934	1939	1944	
Durum (varieties not reported) [1]	96.8	74.5	60.3	41.7	44.6	46.8	1,016,948
Mindum		.3	5.5	15.9	22.5	31.2	678,486
Pentad	1.1	8.2	17.3	11.1	18.3	9.1	196,405
Kubanka	1.2	11.6	12.5	24.6	12.8	8.3	180,217
Peliss	.1	.1	.1	.9	.4	3.5	77,022
Stewart						.6	12,389
Carleton						.3	6,113
Acme		1.6	1.3	3.8	.1	.1	1,786
Kahla	.5	1.1	.5	.1	(*)	.1	1,063
Arnautka	.3	.6	.3	.7	.2	(*)	761
Golden Ball (Viking)					.9		
Nodak		(*)	.6	.6	.1		
Monad		2.0	1.6	.6	.1		
Total reported	100.0	100.0	100.0	100.0	100.0	100.0	2,171,190
Varieties not reported							8,068
Total							2,179,258

[1] Includes durum and red durum classes.

MINDUM

Mindum ranked first among the durum varieties, surpassing Kubanka in 1939 and Pentad in 1934. The distribution of Mindum in 1944 is shown in figure 14. It was grown principally in eastern North Dakota, in the Red River Valley of Minnesota, and in northeastern South Dakota. In 1944 the estimated area was 678,486 acres, or 31.2 percent of the total durum acreage. In 1939 it was 756,329 acres, although the percentage was smaller (22.5 percent). The increase in the acreage of Mindum is due to its high yield and good quality for macaroni. Millers prefer it to older varieties for the manufacture of semolina, a coarse granular flour from which macaroni and other edible pastes are made.

PENTAD

Pentad (red durum) ranked second in acreage in 1944 with 196,405, or 9.1 percent of the total durum wheat acreage. This is less than a third of the 1939 acreage, which was estimated at 613,082, or 18.3 percent. This decrease in the acreage of Pentad is due to the growing of rust-resistant varieties of hard red spring wheat. Pentad has been grown from late seeding in the worst rust sections and is used largely for feed, as it is not suited for the manufacture of semolina because of its red color. The distribution of Pentad in 1944 is shown in figure 15.

With the development and growing of the new rust-resistant durum varieties, Stewart and Carleton, the acreage of Pentad should be further reduced; it is not now a recommended variety.

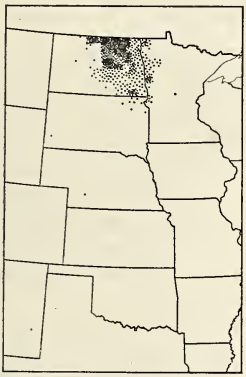

FIGURE 14.—Mindum. 678,486 acres.

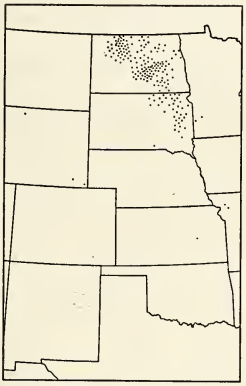

FIGURE 15.—Pentad. 196,405 acres.

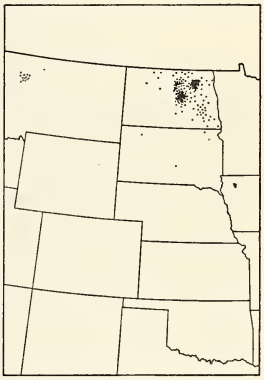

FIGURE 16.—Kubanka. 180,217 acres.

KUBANKA

Although Kubanka was for many years the best known durum variety, much of its acreage is unidentified and has been reported merely as durum. The distribution of the identified Kubanka acreage in 1944 is shown in figure 16. The estimated acreage of Kubanka decreased from 431,630 in 1939, or from 12.8 to 8.3 percent of the class

total. The decrease is due partly to the increase of hard red spring wheats, but partly to the increase of Mindum and the new rust-resistant durum wheats, Stewart and Carleton.

OTHER DURUM VARIETIES

Of the durum varieties grown on less than 100,000 acres in 1944, Peliss (Algerian) increased from 30,000 to 77,022 acres, or from 0.4 to 3.5 percent of the class. This is grown in South Dakota. Stewart and Carleton are rust-resistant durum wheats developed by the United States Department of Agriculture in cooperation with the North Dakota Agricultural Experiment Station. They were distributed in 1943. Stewart increased to 12,389 acres in 1944 and Carleton to 6,113. Stewart is the better yielding in the higher and drier sections, while Carleton is stiff-strawed and therefore better adapted to the lower and richer valley sections. Both were developed from Mindum[3] × Vernal (emmer) backcrosses and are equal to or better than Mindum in quality. The acreage of three additional varieties—Acme, Kahla, and Arnautka—remained about the same as in 1939, while Golden Ball, Nodak, and Monad were not reported as grown in 1944.

Of the 12 durum varieties shown in table 8, only Mindum, Kubanka, Stewart, and Carleton are recommended for growing. The new rust-resistant Stewart and Carleton wheats should replace most of the northern durum acreage and regain some of the area lost to hard red spring wheat during recent years.

Hard Red Winter Varieties

The hard red winter varieties are grown chiefly in the central and south sections of the Great Plains region in Nebraska, Kansas, Colorado, Oklahoma, and Texas. Smaller acreages occur in Illinois, Indiana, Iowa, Mississippi, Montana, Washington, and Oregon and in some other States. There is no acreage in the South Atlantic States. The distribution of this class in 1944 is shown in figure 17.

The relative acreage of hard red winter wheat has gradually increased from 32.0 percent of all wheat in 1919 to 47.6 percent in 1939 and then slightly decreased to 46.8 percent in 1944. The class continues to be the most important in number of acres grown.

The number of commercial varieties has increased from 8 in 1919 to 37 in 1939 and to 44 in 1944. The acreage of Superhard was again combined with that of Blackhull in 1944, as was done in 1939, because it has become impossible to keep these varieties separate. Varieties reported for the first time in 1944 are Red Chief, Triumph, Comanche, Cache, Pawnee, Reliant, Marmin, Wasatch, Kanhull, and Chequamegon. Three varieties, Eagle Chief, Enid, and Cooperatorka, were not reported in 1944, although grown in previous years. The estimated acreage in 1944 and the percentage of the total hard red winter wheat acreage occupied by each of the commercial varieties by 5-year intervals since 1919 are shown in table 9.

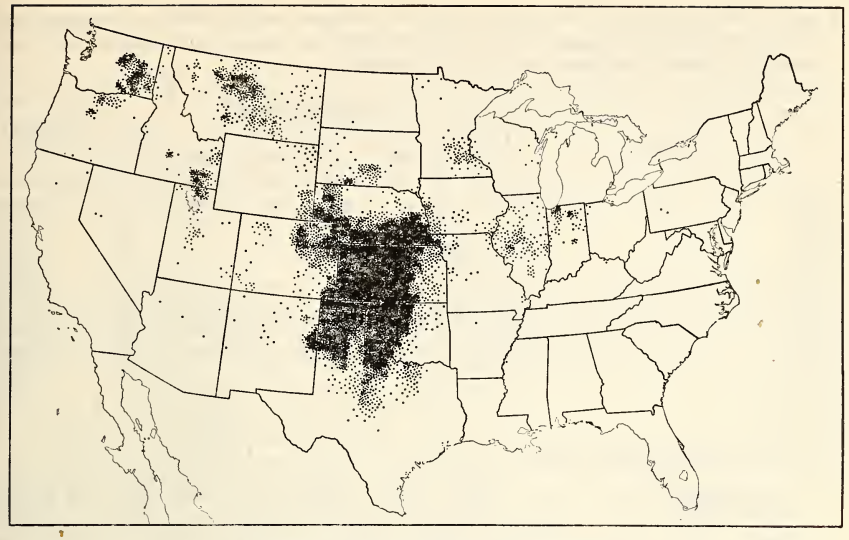

FIGURE 17.—Hard red winter wheat.
30,709,456 acres.

TABLE 9.—*Percentage of the total hard red winter wheat acreage occupied by each variety of that class in the United States at 5-year intervals since 1919 and the estimated acreage for 1944*

[The asterisk (*) indicates the variety was reported as grown, but an estimate of acreage was not given or if given was less than 0.1 percent of the total acreage of the class]

Variety	Percentage of acreage						Acreage, 1944
	1919	1924	1929	1934	1939	1944	
Tenmarq				0.7	11.7	28.6	8,744,053
Turkey	99.4	70.5	60.0	56.7	42.0	27.1	8,295,881
Blackhull	(*)	7.5	22.9	25.4	27.0	15.0	4,602.088
Chiefkan					1.6	5.7	1,752,751
Early Blackhull			(*)	.3	1.1	5.5	1.680,732
Cheyenne				.2	2.5	4.6	1,398,982
Kanred	.5	21.2	13.1	11.0	5.1	3.3	1,023,024
Red Chief						2.7	817,562
Nebred					(*)	1.9	580,954
Iobred		(*)	.4	.4	1.6	.7	217,517
Nebraska No. 60		.1	1.3	2.4	1.4	.6	187,464
Karmont		(*)	.3	.3	.4	.6	190,394
Minturki		.2	.3	.6	.5	.5	164,602
Purkof			[1]2.0	[1]2.5	1.2	.5	158,753
Yogo					.1	.5	150,924
Iowin			(*)	(*)	.4	.4	116,841
Triumph						.2	72,459
Newturk			.1	.1	.2	.2	59,023
Ridit		(*)	.6	.6	.4	.2	49,201
Mosida			.1	.1	.1	.1	42,389
Redhull			(*)	.3	.5	.1	36,108
Michikof		.3	.5	.4	.3	.1	32,341
Brill					(*)	.1	30,691
Rio				(*)	.1	.1	29,979
Comanche						.1	21,522
Utah Kanred			.1	.1	.2	.1	21,273
Relief				(*)	.3	.1	20,375
Montana No. 36	(*)	.1	.1	.1	.1	.1	15,256
Cache						.1	13,840
Pawnee						.1	11,200
Oro			(*)	(*)	.2	.1	10,857

TABLE 9.—*Percentage of the total hard red winter wheat acreage occupied by each variety of that class in the United States at 5-year intervals since 1919 and the estimated acreage for 1944*—Continued

Variety	Percentage of acreage						Acreage, 1944
	1919	1924	1929	1934	1939	1944	
Ashkof			(*)	(*)	(*)	(*)	8,610
Ioturk			(*)	(*)	0.1	(*)	7,291
Reliant						(*)	6,022
Ilred		0.1	0.1	(*)	(*)	(*)	4,633
Marmin						(*)	3,240
Wisconsin Pedigree No. 2	(*)	(*)	(*)	(*)	(*)	(*)	3,182
Wasatch						(*)	2,992
Sherman			(*)	(*)	(*)	(*)	1,824
Sibley 81				[1] 0.2	.2	(*)	1,500
Ukrainka				(*)	(*)	(*)	1,340
Alton	(*)	(*)	.1	(*)	.5	(*)	1,215
Kanhull						(*)	1,165
Chequamegon						(*)	379
Eagle Chief			(*)	.1	.2		
Enid					(*)		
Cooperatorka				.2	(*)		
Varieties not reported in 1939 and 1944	0.1	(*)	(*)	(*)			
Total reported	100.0	100.0	102.0	102.7	100.0	100.0	30,591,925
Varieties not reported							117,531
Total							30,709,456

[1] Percentage reported as of soft red winter class, as it was previously reported as a soft red winter variety

Two varieties, Tenmarq and Turkey, were grown on more than 8 million acres each in 1944, while Blackhull, Chiefkan, Early Blackhull, Cheyenne, and Kanred each occupied more than 1 million acres. The combined area occupied by these 7 varieties amounted to 89.8 percent of the total class acreage in 1944. The acreage of Tenmarq increased sharply, while Turkey and Blackhull showed decided decreases. Other varieties showing marked increases were Chiefkan, Early Blackhull, Cheyenne, Red Chief, and Nebred. Comanche and Pawnee, two newly introduced varieties, may not have occupied so great an acreage as the summary indicates.

TENMARQ

Tenmarq was developed at the Kansas Agricultural Experiment Station in cooperative experiments with the Division of Cereal Crops and Diseases, United States Department of Agriculture. It was distributed in 1932 and increased rapidly, becoming the leading variety of hard red winter wheat in 1944, with an estimated area of 8,744,053 acres. The variety also ranked first among all wheats in the United States. The distribution of Tenmarq in 1944 is shown in figure 18. It was the leading variety in Kansas, Oklahoma, and Texas, and in addition smaller acreages were reported in Nebraska, Colorado, Missouri, Mississippi, Arizona, and Montana. This variety was first reported in 1934 when it was estimated to occupy 0.7 percent of the class acreage; it has increased very rapidly until now it occupies 28.6 percent of the class acreage. For the most part it has increased at a loss in the acreage of Turkey, Blackhull, and Kanred. It has now spread over a much wider area than was thought possible when it was first distributed. The variety was first recommended for south-central Kansas, but it has spread over most of the State, through central

and western Oklahoma, north-central and northwestern Texas, and even into eastern Colorado and southern Nebraska, where it seems to be well adapted. The variety is early and is known to be somewhat lacking in cold resistance, but it gives good yields where winterkilling does not occur. It has a lower test weight per bushel than the Blackhull wheats, and the kernels have a tendency to yellowberry, but the milling and baking characteristics are very acceptable. For these reasons the variety has the hearty approval of most of the grain trade.

TURKEY

The distribution of Turkey wheat in 1944, including wheats grown under the name of Kharkof and a number of other synonyms, is shown in figure 19. Until the present survey Turkey was the leading variety

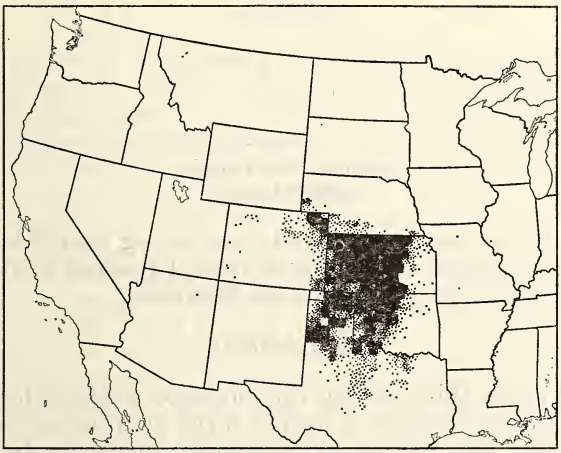

FIGURE 18.—Tenmarq.
8,744,053 acres.

of wheat in number of acres grown, but is now surpassed by Tenmarq. In the 1919 survey Turkey occupied 99.4 percent of the hard red winter wheat acreage, but since that time its area has gradually decreased until in 1944 it was estimated as being grown on only 27.1 percent of the class acreage, or 8,295,881 acres. Turkey is still grown in all but the Eastern and Southeastern States. In 1944 it was reported from 29 States, with the largest acreages in Kansas, Nebraska, Texas, Oklahoma, and Montana. It was the leading variety in Wisconsin, Nebraska, Idaho, Wyoming, Colorado, and Utah, and it ranked second in New Mexico, Arizona, and Washington. The greatest decreases were reported in Kansas, Nebraska, Oklahoma, Texas, and Colorado, where it is being replaced by such new varieties as Tenmarq, Cheyenne, and Nebred.

As stated above, the acreage of Turkey included the reported acreage of Kharkof. In the 1944 survey the acreage of Kharkof was tabulated separately, as in previous surveys. The variety was reported from Colorado, Illinois, Missouri, Montana, Nebraska, and Oklahoma, with a total estimated acreage of 17,158. This is a very much smaller

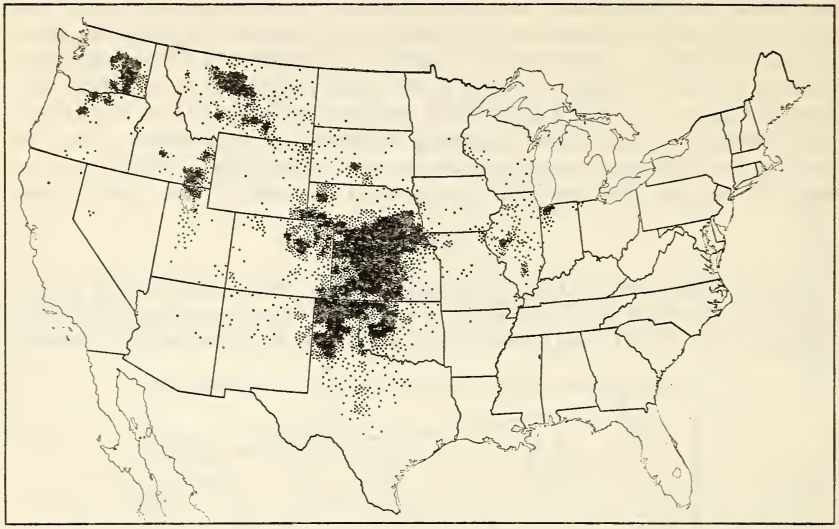

FIGURE 19.—Turkey.
8,295,881 acres.

figure than in previous years, and considering that Kharkof is decreasing and cannot be distinguished from Turkey it would seem that combining the acreages of the two was justified.

BLACKHULL

Blackhull ranks third among the hard red winter wheat varieties. It is grown on approximately half as large an area as is occupied by Tenmarq. The distribution of Blackhull, including Superhard, is shown in figure 20. This variety was first reported in the 1919 survey and gradually increased until it occupied 27.0 percent of the hard red

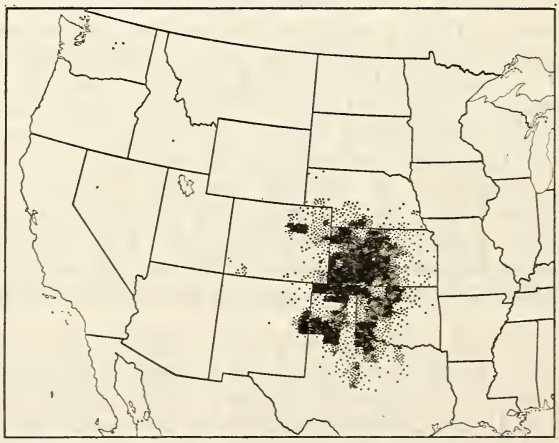

FIGURE 20.—Blackhull.
4,602,088 acres.

winter wheat acreage in 1939. From then its importance decreased, and in 1944 it was estimated to have been grown on only 15.0 percent of the class acreage. Blackhull was reported from 10 States, with the largest acreages in Kansas, Texas, Oklahoma, Colorado, and New Mexico. Not only does this variety rank third among hard red winter wheats but it also ranks third among all wheats in the United States. The variety apparently reached its peak about 1939, and during the last 5 years there have been decided decreases in Kansas, Oklahoma, Texas, and Nebraska, where it was replaced by Tenmarq and other newer varieties. There have been slight increases in New Mexico and Colorado. The variety was popular because of the high test weight, earliness, and good yield, but with the distribution of newer wheat, such as Tenmarq, it is losing some of its popularity.

CHIEFKAN

The distribution of Chiefkan wheat in 1944 is shown in figure 21. This beardless variety was first reported in 1939 when it occupied 1.6 percent of the class total, but by 1944 it had increased to 5.7 percent of the class total, or to approximately 1,700,000 acres. Among all the wheats in the United States it ranked sixth in seeded acreage. Chiefkan was reported from five States—Kansas, Oklahoma, Texas, Colorado, and Nebraska—with the acreages in these States being in the order listed. More than 1 million acres were reported from Kansas. The acreage is the heaviest in southwestern Kansas, western Oklahoma, and in the Texas Panhandle. Chiefkan has black glumes, is beardless, and does not shatter, but it is most noted for its high test weight per bushel. Largely owing to this, it became popular with the farmers. Its serious faults are rather unsatisfactory baking characteristics and susceptibility to most wheat diseases. Farmers feel that it produces high yields, but this is not borne out in experimental trials. Vigorous opposition to the variety was started in 1945.

EARLY BLACKHULL

Early Blackhull is one of the earliest and most winter-tender varieties of hard red winter wheat now being grown commercially. In spite

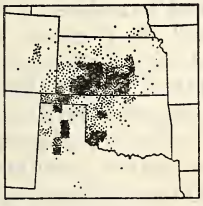

FIGURE 21.—Chiefkan. 1,752,751 acres.

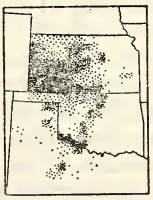

FIGURE 22.—Early Blackhull. 1,680,732 acres.

of this lack of cold resistance it has spread rather rapidly since 1929, when it was first reported. In the 1944 survey it was estimated to occupy 5.5 percent of the class total, or 1,680,732 acres. The distribution of Early Blackhull is shown in figure 22. The variety was re-

ported from Kansas, Oklahoma, Texas, and Colorado, with the principal acreage being located in the first three States listed. Early Blackhull is grown chiefly in western Kansas, western Oklahoma, and the north-central part of Texas. The increase of this variety has been due to good yields of grain having high test weight per bushel. Owing to its extreme earliness it is often able to escape drought and also severe storms which come just before some later varieties mature. By growing some Early Blackhull, large wheat growers are able to spread their harvest, thus having part of their crop ready to cut while the rest of it is still green. Early Blackhull is not a particularly high-yielding variety, but the farmers are willing to sacrifice some yield for earliness. The worst fault of the variety is its lack of desirable milling and baking characteristics, and therefore it has not been on the recommended list of any State.

CHEYENNE

Cheyenne was developed at the Nebraska Agricultural Experiment Station, Lincoln, Nebr., and distributed in 1933. It was reported for the first time in the 1934 survey and since that time has gradually increased until in 1944 it occupied 1,398,982 acres and ranked eleventh in acreage among the wheats of the United States. In 1944 it was reported as being grown in Nebraska, Kansas, Oklahoma, and Texas, with smaller acreages in Colorado, Wyoming, South Dakota, and Illinois. More than half of the total acreage was reported from Nebraska, where it is most popular in the western counties. It is also popular in adjoining counties of Colorado and Kansas. In Nebraska, the acreage of Cheyenne is exceeded only by that of Turkey. The variety is popular because of stiff straw and an erect head and is considered a very good combine type. Owing to its susceptibility to stem and leaf rusts it lost considerable popularity during the epidemic of 1937 and 1938, but in areas where rusts are not so serious the variety is still popular and its acreage is increasing. The distribution of Cheyenne in 1944 is shown in figure 23.

KANRED

Kanred, first distributed in 1917, was developed in cooperative experiments at the Kansas Agricultural Experiment Station, Manhattan. It was one of the first improved varieties to be released in the hard winter wheat area. It reached its greatest popularity in about 1924 when it occupied 21.2 percent of the class area and ranked third among the wheats in the United States. Since that time its area has decreased, and in 1944 it occupied about a million acres, or 3.4 percent of the class total. The distribution of Kanred in 1944 is shown in figure 24. The variety was reported as being grown in 15 States, with the largest acreages in Kansas, Texas, Colorado, and Oklahoma. Fairly sizable acreages were also reported from Nebraska, South Dakota, and Wyoming. It is losing its popularity because of weak straw and the presence of races of stem rusts to which it is not resistant; it is being replaced by Tenmarq and other improved varieties.

RED CHIEF

One of the new varieties appearing in the 1944 survey is Red Chief, a beardless red-chaffed variety having an extremely high test weight per bushel and good kernel color. The distribution of Red Chief in

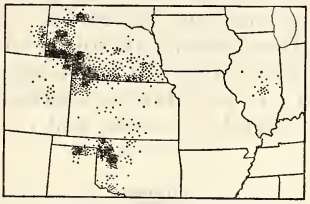

FIGURE 23.—Cheyenne.
1,398,982 acres.

1944 is shown in figure 25. It will be seen that the variety is grown chiefly in southwestern and south-central Kansas, north-central Oklahoma, and the Texas Panhandle, with a small acreage also reported in Colorado. It is known that the acreage of this variety has increased since 1944 in all of the four States mentioned. In 1944 Red Chief

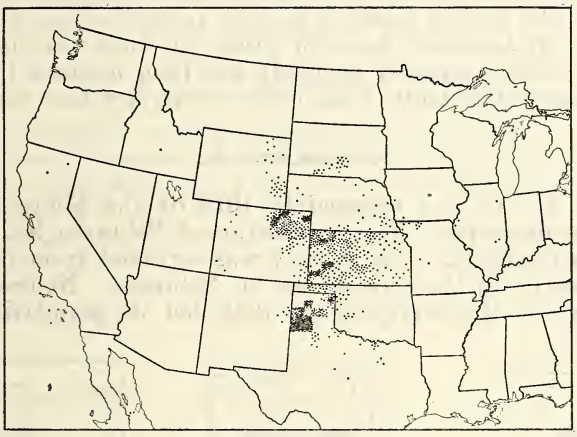

FIGURE 24.—Kanred.
1,023,024 acres.

occupied 817,562 acres, or 2.7 percent of the class total. Red Chief gives a higher test weight than any other variety of hard red wheat now being grown, and it yields fairly well. Unfortunately its milling and baking characteristics are not acceptable to most of the trade, and therefore there is a vigorous campaign against it as well as Chiefkan. The results of this campaign will not be known with certainty until after the next survey.

NEBRED

Nebred, developed at the Nebraska station, was distributed in 1938. Its distribution in 1944 is shown in figure 26. This variety was first reported in 1939, and it has increased gradually during the last 5 years. In 1944 it was reported as being grown in six States, with the principal acreage in southern Nebraska. Smaller acreages were reported from Kansas, Iowa, South Dakota, Colorado, and Oklahoma. Nebred was estimated to occupy 580,954 acres, or 1.9 percent of the class total. The variety is popular in western Nebraska because of good yield, resistance to stinking smut, and outstanding milling and baking properties.

IOBRED

Iobred was developed at the Iowa Agricultural Experiment Station and distributed in 1923. It has been reported in the survey since 1924, but has never become important. It reached its greatest acreage in 1939 when it was estimated to occupy 1.6 percent of the class total, but during the last 4 years it has decreased to 0.7 percent of the class acreage, or only slightly more than 200,000 acres. The distribution of this variety is shown in figure 27. Iobred was reported from six States, with the principal acreages in Kansas, Missouri, Iowa, and Nebraska. The variety seems to be most popular along the Missouri River, probably because it has stiff straw and some resistance to stem rust. Its spread westward probably has been lessened by the fact that it shatters rather badly when grown under dry-land conditions.

NEBRASKA NO. 60

Nebraska No. 60 was released in 1918 by the Nebraska station, where it was developed. The distribution of Nebraska No. 60 in 1944 is shown in figure 28. This variety was reported from four States, although nearly all the acreage was in Nebraska. Nebraska No. 60 has appeared in the surveys since 1924, but its popularity has de-

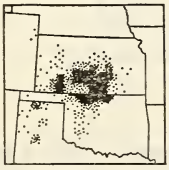

FIGURE 25.—Red Chief. 817,562 acres.

FIGURE 26.—Nebred. 580,954 acres.

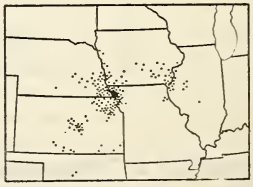

FIGURE 27.—Iobred. 217,517 acres.

creased since 1934. An estimated 187,464 acres was grown in 1944, which was considerably less acreage than in 1939. In Nebraska it now ranks fifth among the varieties grown in the State. This variety was most popular during the years when winterkilling was a factor, but in more recent years, since earlier wheats have given higher yields, it has lost much of its popularity except in western Nebraska.

KARMONT

Karmont was developed in cooperative experiments with the Montana Agricultural Experiment Station at the Judith Basin Branch Station, Moccasin, and was distributed in 1921. Karmont was reported only from its home State in 1944, where it was grown on 190,394 acres, or 0.6 percent of the class total. In Montana it is the second most important hard red winter wheat, with its acreage being concentrated in the north-central part of the State. The distribution of the variety is shown in figure 29.

MINTURKI

Minturki, a production of the Minnesota Agricultural Experiment Station, University Farm, St. Paul, was distributed in 1919. The distribution of Minturki wheat in 1944 is shown in figure 30. This variety was reported from four States and had a total area of 164,602 acres. The principal acreage is in southeastern Minnesota, with smaller quantities being grown in Illinois, Wisconsin, and Nebraska. The variety has been reported in the survey since 1924, but has never either decreased or increased a great deal during that time. Minturki is a popular winter wheat because it has considerable winter hardiness, and therefore it can be grown as far north as Minnesota. It is also resistant to some races of stem rust and bunt.

PURKOF

Purkof was classed among the soft wheats in the surveys previous to 1939. The distribution of this variety in 1944 is shown in figure 31. It was estimated to have been grown on 158,753 acres, or 0.5 per-

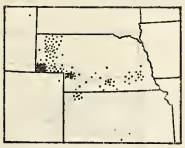

FIGURE 28.—Nebraska No.60. 187,464 acres.

FIGURE 29.—Karmont. 190,394 acres.

FIGURE 30.—Minturki. 164,602 acres.

cent of the class total. It was reported from four States, with the principal acreage in Indiana, where it was developed, and smaller acreages in Illinois, Pennsylvania, and Ohio. Purkof is grown most extensively in northwestern Indiana and in central Illinois.

YOGO

Yogo was distributed in 1932 from the Moccasin, Mont., station and was first reported in 1939. Since then it increased gradually until 1944, when it was estimated to occupy 150,924 acres. Most of this

acreage was in Montana, but a small quantity was reported in Washington. The distribution of the variety is shown in figure 32. Yogo is popular because it has outstanding cold resistance and is able to give a much better yield than other varieties of hard red winter wheat when winterkilling is serious. It also has resistance to some races of bunt.

IOWIN

Iowin was developed at the Iowa station and was first reported in 1929, but has never become one of the important varieties. In 1944 it was estimated to have occupied 0.4 percent of the class total and was grown on 116,841 acres. It was reported from six States, with the principal acreage being in Iowa and Nebraska along the Missouri River and with smaller acreages in Missouri, Kansas, South Dakota, and Illinois. The distribution of this variety is shown in figure 33.

OTHER VARIETIES OF HARD RED WINTER WHEAT

Several additional varieties of hard red winter wheat are shown in table 9, but their acreages are so small that distribution maps are not given. Triumph, a new wheat, was reported on considerable acreage in Oklahoma and a somewhat smaller acreage in Kansas. This variety has extreme earliness and may become a competitor for Early Blackhull. Newturk was again reported from Montana, where its acreage remained about the same as in 1939. Ridit was reported from Idaho, Washington, and Montana, but its total seems to be decreasing. Mosida was reported from Idaho, Utah, Washington, and Oregon where the total acreage of this variety has practically doubled in the last 5 years. Redhull was grown on more than 150,000 acres in 1939, but had decreased until in 1944 it was estimated to occupy only 36,108 acres. It was reported chiefly in Oklahoma and Kansas, and since it does not have any desirable characteristics it may soon no longer be grown. The acreage of Michikof is decreasing rather rapidly, since it was grown on only 32,341 acres in 1944. Brill

FIGURE 31.—Purkof. 158,753 acres.

FIGURE 32.—Yogo. 150,924 acres.

FIGURE 33.—Iowin. 116,841 acres.

increased from more than 7,000 to more than 30,000 acres in Illinois during the last 5 years.

A large number of other varieties of hard red winter wheat were reported, but in most cases on very minor acreages. Two new wheats, namely Comanche and Pawnee, reported for the first time, will undoubtedly increase rapidly. Cache and Wasatch, also reported for the first time, will probably increase because of resistance to dwarf smut. A number of older varieties, such as Utah Kanred, Oro, Ioturk, Alton, and Sibley 81, seem to be disappearing.

Of the 47 hard red winter varieties listed in table 9, Tenmarq, Turkey, Cheyenne, Nebred, and the other new varieties, Pawnee, Comanche, and Wichita, are considered the most promising by agronomists of the agricultural experiment stations in the principal winter wheat regions of the South Central States. Others having a more local adaptation include Iobred and Iowin in Iowa; Minturki in Minnesota; Yogo, Karmont, and Newturk in Montana; Mosida in Idaho; Ridit in Washington; Rio in Oregon; and Relief, Cache, and Wasatch in Utah.

Soft Red Winter Varieties

The soft red winter wheat varieties are grown principally in the semihumid to humid areas east and south of the hard red winter wheat

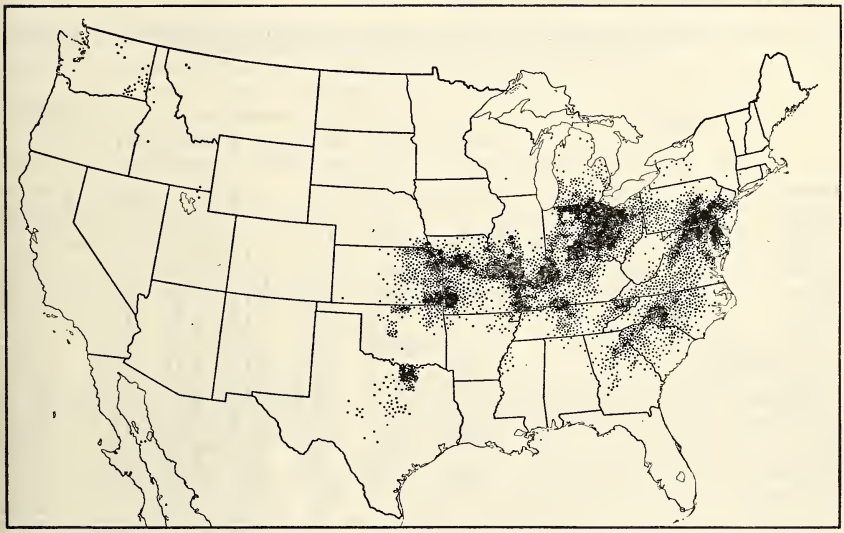

FIGURE 34.—Soft red winter wheat.
11,937,179 acres.

belt, in the eastern half of the United States, and on a small acreage in the Pacific Northwest. There is, however, no sharp line of demarcation of the areas where the two classes are grown. Where they overlap there is considerable fluctuation from year to year in the relative acreages of these classes, depending largely on comparative yields and prices obtained. Soft red winter ranks third among the various market classes of wheat and in 1944 was estimated to make up 18.2 percent of the total wheat acreage of the United States. The distribution in 1944 is shown in figure 34.

Estimates of the 1944 acreages and the percentages of the total reported soft red winter wheat acreage occupied by each variety by 5-year intervals since 1919 are shown in table 10. In 1944, 70 varieties were grown, and of this number 9 were reported for the first time. These new varieties, in order of acreage, are Hardired, Fairfield, Sanford, Nured, Carala, Austin, Kentucky R 47 (Currell selection),

Sanett, and Prairie. Five varieties reported as being grown in 1939 were not reported in 1944, indicating that among the soft red winter wheats new ones are being developed and distributed faster than the old ones are dropping out. The number of varieties grown commercially is much larger than for any other class.

Two varieties, Thorne and Fultz, each were reported as being grown on more than 1 million acres. These two varieties rank ninth and fourteenth, respectively, among the wheats in the United States. Clarkan, Fulcaster, Kawvale, Redhart, Leap, and Trumbull had acreages between 500,000 and 1,000,000, and 13 varieties were grown on from 100,000 to 500,000 acres.

TABLE 10.—*Percentage of the total soft red winter wheat acreage occupied by each variety of that class in the United States at 5-year intervals since 1919, and the estimated acreage for 1944*

[The asterisk (*) indicates the variety was reported as grown, but an estimate of acreage was not given or if given was less than 0.1 percent of the total acreage of the class]

Variety	Percentage of acreage						Acreage, 1944
	1919	1924	1929	1934	1939	1944	
Thorne					(*)	13.7	1,587,783
Fultz	23.5	17.1	14.2	15.4	12.2	10.4	1,212,835
Clarkan					1.2	7.8	902,199
Fulcaster	12.6	17.3	13.7	11.5	10.3	7.0	815,267
Kawvale				.4	10.2	6.9	804,235
Redhart			(*)	.9	2.3	5.9	690,421
Leap	2.6	4.9	6.6	5.9	5.6	5.7	659,553
Trumbull	(*)	5.7	8.9	9.4	10.8	5.1	590,448
Nittany		2.5	3.9	3.4	4.2	4.0	461,762
Fulhio		.8	2.5	4.4	7.3	3.7	432,550
Red May	5.7	3.8	7.8	8.1	5.0	3.3	378,079
Mediterranean	13.6	5.7	5.3	4.3	3.2	2.9	331,228
Currell	3.2	2.5	4.2	4.0	3.7	2.8	329,804
Purplestraw	1.3	1.1	1.5	2.5	2.5	2.6	303,426
Forward		(*)	1.5	2.1	2.7	2.1	248,378
Poole	12.0	10.0	5.9	5.6	3.1	1.8	208,188
Rudy	2.0	2.4	1.9	1.8	1.9	1.8	203,345
Flint	.5	1.0	.6	1.5	1.1	1.5	178,934
Red Rock	1.1	3.3	2.6	1.8	1.3	1.4	163,212
Red Wave	5.5	4.2	2.5	2.5	1.4	1.0	121,278
V. P. I. 131			.8	.9	.8	.9	103,258
Baldrock				.2	.9	.7	84,993
Nigger	1.4	1.9	1.2	1.3	1.0	.7	81,650
Goens	.6	1.0	.2	.6	.8	.5	57,431
Leapland					(*)	.4	48,861
Wabash					(*)	.4	46,806
Russian Red	.8	.5	.6	.3	(*)	.4	46,067
Hardired						.4	45,202
Triplet		1.0	1.6	1.0	.8	.4	43,882
Fairfield						.3	37,873
Purdue No. 1				(*)	.5	.3	36,651
Sanford						.3	33,970
Early Premium					.4	.3	32,462
Fultzo-Mediterranean	1.5	.8	.4	.3	.1	.3	28,498
Mammoth Red	(*)	.1	.5	.4	.2	.2	28,047
Jones Fife	2.3	2.0	1.6	1.0	.5	.2	24,795
Denton			.2	.4	.3	.2	24,456
Russian		.2	.2	.1	.2	.2	24,278
Red Russian	.8	.5	.6	.2	.1	.2	21,880
Nured						.2	19,380
Harvest Queen	4.9	3.9	3.5	3.1	1.5	.2	19,223
China	.3	.6	.1	.1	.1	.1	13,237
Illinois No. 2				(*)	.1	.1	12,672
Rice	.2	.5	.1	.1	.3	.1	10,793
Gladden	(*)	1.0	.4	.3	.2	.1	8,038
Carala						.1	7,247
Hybrid 123	.1	.5	.3	(*)	(*)	.1	6,431
Austin						.1	6,050
Lofthouse	(*)	(*)	.1	(*)	(*)	.1	6,359
Ashland		(*)	.1	(*)	(*)	(*)	5,384
Grandprize	.2	.1	(*)	(*)	.1	(*)	4,313
V. P. I. 112			.3	.1	.1	(*)	4,201
Berkeley Rock			.2	.2	.1	(*)	3,872

TABLE 10.—*Percentage of the total soft red winter wheat acreage occupied by each variety of that class in the United States at 5-year intervals since 1919, and the estimated acreage for 1944*—Continued

Variety	Percentage of acreage						Acreage, 1944
	1919	1924	1929	1934	1939	1944	
Prosperity	0.2	(*)	(*)	0.1	0.1	(*)	2,909
Red Clawson	.4	0.2	0.1	.1	.1	(*)	2,790
Mealy	.3	.1	.1	(*)	(*)	(*)	2,748
Valprize				(*)	.1	(*)	2,722
Kentucky R 47						(*)	2,570
Oakley	(*)	(*)	(*)		(*)	(*)	2,531
Squareheads Master				(*)	(*)	(*)	2,194
Wheedling	.1	(*)	(*)	(*)		(*)	1,350
Diehl-Mediterranean	.6	.6	.4	.4	.1	(*)	1,344
Gasta				(*)	(*)	(*)	1,123
Gipsy	.6	.8	.3	.3	.1	(*)	1,102
Red Indian		.3			.1	(*)	638
Portage	(*)	.5	.1	.2	.1	(*)	524
Sanett						(*)	482
Odessa	.3	.2	.1	(*)	(*)	(*)	433
Nabob			(*)	(*)	.1	(*)	412
Prairie						(*)	244
Valley	(*)	(*)	(*)	.1	.1		
Canawa					(*)		
Climax	.1	(*)	.1	(*)	(*)		
Kruse				(*)	(*)		
Shepherd			(*)	(*)	(*)		
Varieties not reported in 1939 or 1944	.7	.4	.2	(*)			
Total reported	100.0	100.0	[1]98.0	[1]97.3	100.0	100.0	11,627,301
Varieties not reported							309,878
Total							11,937,179

[1] Formerly included Purkof, which is now classed as a "hard red winter wheat" variety.

THORNE

Thorne was developed at the Ohio Agricultural Experiment Station and distributed in 1937. In 1939, only 3,239 acres were reported, while it was estimated to occupy 1,587,783 acres in 1944, comprising 13.7 percent of the soft red winter wheat acreage and 2.43 percent of the total wheat acreage. As indicated before, it ranks ninth among all wheat varieties in point of acreage. In 1944 Thorne was reported from 12 States, the largest acreage being in Ohio. Other States reporting large acreages were Pennsylvania, Indiana, Illinois, Kentucky, and Michigan, with smaller totals in New Jersey, Missouri, Maryland, Virginia, West Virginia, and Tennessee. Thorne is the leading variety in Ohio and ranks second in New Jersey.

The increase in acreage of Thorne has been very rapid since 1939. In Ohio it was estimated to have increased from 2,894 acres to 1,587,783 acres during the 5 years, or an increase in the percentage of the State acreage from 0.1 to 56.0 percent. In 1944 Thorne was grown in practically every county in Ohio. Its increase seems to have been chiefly at the expense of Trumbull. The distribution of Thorne wheat in 1944 is shown in figure 35.

FULTZ

Fultz was estimated to occupy 1,212,835 acres in 1944. The variety occupied 10.4 percent of the class area and 1.85 percent of the entire

wheat area and ranked second in its class and fourteenth among the wheat varieties in the United States. The distribution of Fultz wheat in 1944 is shown in figure 36. The variety was reported as being grown in 16 States, with the largest acreages in Indiana, Illinois, Missouri, and Kentucky. Fairly sizable acreages were also reported in Ohio, Tennessee, Maryland, and Virginia.

The acreage of Fultz has been decreasing rather steadily since 1919 when it was reported as occupying 23.5 percent of the soft red winter wheat area, ranking third among the varieties grown in the United States. The decrease from 1939 to 1944 was not so large as in some previous periods, but was greatest in Illinois, Maryland, Missouri, and Tennessee, and there was a slight increase in Ohio and Indiana.

CLARKAN

Clarkan, a variety developed by a Kansas farmer, was first distributed in 1934 and was reported for the first time in the 1939 survey. By 1944 it had increased in importance until it ranked third among the

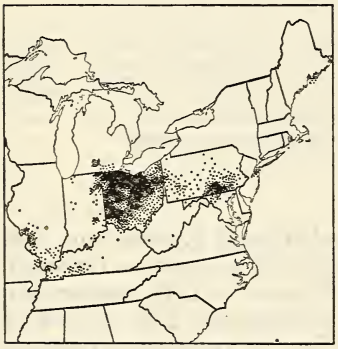

FIGURE 35.—Thorne.
1,587,783 acres.

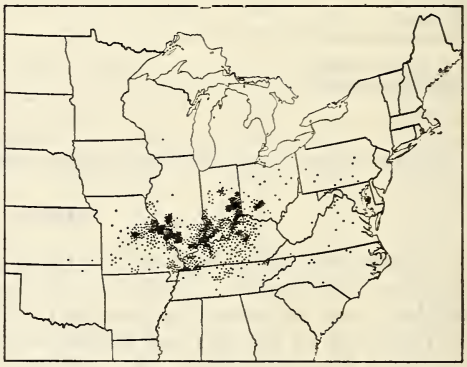

FIGURE 36.—Fultz.
1,212,835 acres.

soft red winter wheats, with an estimated acreage of 902,199. It was estimated to occupy 7.8 percent of the class area and 1.38 percent of the total wheat acreage of the United States. The distribution of Clarkan in 1944 is shown in figure 37. The variety was reported from five States, with the greatest acreage being in Missouri. Kansas, Oklahoma, Illinois, and Kentucky also reported acreages. Clarkan acreages increased in all of the States, with the greatest increase in Missouri, where it jumped from about 63,000 acres to more than 660,000 acres in 5 years. This increase was at the expense of such varieties as Fultz, Red May, and Kawvale.

FULCASTER

Fulcaster is one of the oldest varieties of wheat in the United States and has been reported in each survey beginning in 1919. It reached its peak in 1924 when it occupied 17.3 percent of the class area and since

then has been decreasing rather gradually until, in 1944, it was estimated to have occupied 7.0 percent of the class area and 1.25 percent of the total wheat area. The acreage of this variety was reported as 1,223,308 in 1939 compared with 815,267 in 1944. The distribution of Fulcaster in 1944 is shown in figure 38. Fulcaster is one of the most widely grown varieties and was reported from 21 States, with the largest acreages in Tennessee, Illinois, and Virginia, all of which had more than 100,000 acres. Rather large acreages were reported from Pennsylvania, Ohio, Missouri, Nebraska, Kansas, Maryland, West Virginia, North Carolina, Kentucky, and Oklahoma. In most of the States rather sizable decreases were shown during the last 5 years, especially in Kansas, Maryland, Missouri, Oklahoma, and Texas. Slight increases were reported for Ohio, West Virginia, and Georgia. This is a variety that is being gradually displaced by some of the newer productions.

KAWVALE

Kawvale was released by the Kansas Agricultural Experiment Station in 1932 and appeared in the survey for the first time in 1934. The acreage increased rather rapidly and in 1939 was estimated to occupy 10.2 percent of the class total, but during the last 5 years the acreage of this variety has decreased and in 1944 it was estimated to occupy 6.9 percent of the class total and 1.23 percent of the total wheat area. In 1944 Kawvale was estimated to occupy 804,235 acres in seven States.

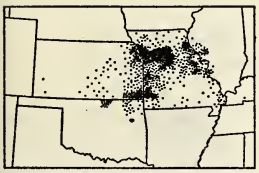

FIGURE 37.—Clarkan.
902,199 acres.

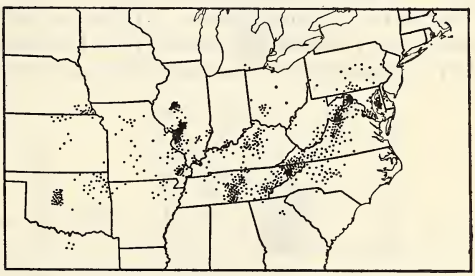

FIGURE 38.—Fulcaster.
1,223,308 acres.

The distribution of the variety in 1944 is shown in figure 39. The greatest area, about 500,000 acres, was reported in eastern Kansas, with large quantities of the variety also present in western Missouri and in Illinois and smaller ones in Oklahoma, Nebraska, Iowa, and Arkansas. The chief decreases, which were in Kansas and Missouri, were caused by replacement with Clarkan. Kawvale has early maturity, resistance to leaf rust and loose smut, moderate resistance to stem rust and hessian fly, and gives a high yield despite a tendency to shatter. For these reasons it was very popular with the farmers. Although the grain usually looks like a soft wheat and is classed as such, the kernels are often semihard and similar to some of the hard red winter wheats in milling and baking characteristics. This has caused the variety to

become rather unpopular with the trade where there have been vigorous campaigns against it, and apparently the acreage of Kawvale is decreasing.

REDHART

Redhart is a variety largely confined to the southeastern United States, being reported from Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Kentucky, Tennessee, Alabama, Mississippi and Arkansas. The distribution of Redhart in 1944 is shown in figure 40. The greatest acreages were in North Carolina, South Carolina, and Virginia. The variety was first reported in 1929 and has increased rather gradually since that time. It made its greatest increase during the last 5 years and is now estimated to occupy 690,421 acres, or 5.9 percent of the class total. The greatest increases during the last 5 years were reported in North Carolina, Virginia, South Carolina, and Georgia. It is the leading variety in North Carolina and South Carolina and ranked second in Virginia and Georgia.

LEAP

The distribution of Leap wheat in 1944 is shown in figure 41. It was estimated to have been grown on 659,553 acres, comprising 5.7 percent of the class total. This variety has been reported in each of the surveys, but the acreage has not varied a great deal since 1934. In 1944 Leap was reported from 14 States, with the largest acreage in Maryland, Pennsylvania, Virginia, North Carolina, and New Jersey, being very definitely confined to the eastern part of the United States. It is apparently well adapted to the eastern area and has not increased

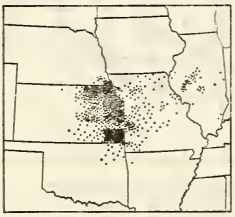

FIGURE 39.—Kawvale.
804,235 acres.

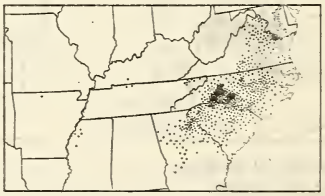

FIGURE 40.—Redhart.
690,421 acres.

or decreased greatly since 1919. In Maryland and Kentucky there were decided increases, while in Pennsylvania, North Carolina, Delaware, and Virginia there were decreases in acreages.

TRUMBULL

In 1916 Trumbull was distributed by the Ohio station to farmers in that State. In 1944 it was estimated to occupy 590,448 acres, or 5.1 percent of the class total. This was a decided decrease, since in 1939 it was grown on more than 1 million acres and occupied 10.8 percent of the class total. The distribution of Trumbull wheat in 1944 is shown

in figure 42. Trumbull was reported from eight States, with by far the greatest acreage in Ohio. Indiana reported nearly 150,000 acres, but in all other States it is a variety of minor importance. From 1924 to 1939 Trumbull was the leading variety of wheat in Ohio, being grown on more than 1 million acres, but during the last 5 years it has been replaced by Thorne and now ranks second in that State. In Indiana the acreage of the Trumbull decreased slightly, but the percentage went up due to a reduction in the wheat acreage of that State. Trumbull apparently is going to be replaced rather rapidly.

NITTANY

Nittany was reported as being grown in 11 States in 1944, and the distribution is shown in figure 43. This variety has been grown since 1918, but was first reported in the 1924 survey. It has never become

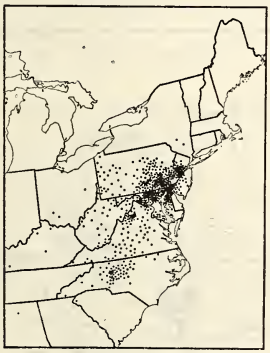

FIGURE 41.—Leap.
659,553 acres.

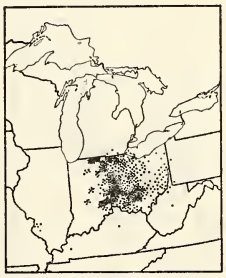

FIGURE 42.—Trumbull.
590,448 acres.

important among the wheats of the United States, but was estimated to occupy 461,762 acres in 1944, or 4.0 percent of the class total, with nearly 75 percent of this acreage in Pennsylvania. Fairly large acreages were reported in Maryland and Delaware. The acreage of Nittany increased in Maryland and decreased slightly in Pennsylvania. Nittany is still the leading variety in Pennsylvania, where it was developed, but it no longer has the large acreage that was reported for it in 1939. Nittany is also the leading variety in Delaware and ranks second in Maryland.

FULHIO

Fulhio was estimated to have been grown on 432,550 acres in 1944. This constituted 3.7 percent of the class total and was approximately half the percentage of the acreage of this variety reported in 1939. The distribution of Fulhio is shown in figure 44. The variety was again reported from seven States, with the principal acreage being in southern Illinois, Ohio, and southwestern Missouri. Smaller acreages were in Pennsylvania, Indiana, West Virginia, and Kentucky.

The principal decrease in acreage was in Ohio, with smaller decreases in Illinois, Indiana, and Missouri. Fulhio is another variety developed in Ohio that apparently is being replaced by Thorne.

RED MAY

It is estimated that Red May wheat occupied 378,079 acres in 1944, which was 3.3 percent of the class total. It was reported from 11 States, with the largest acreages in Missouri and Indiana and smaller ones in Illinois, Arkansas, Oklahoma, and Texas. The distribution of Red May is shown in figure 45. In Arkansas, Red May is the leading variety of wheat, and in this State it showed a sizable increase during the last 5 years. Other increases were reported in Oklahoma and Texas, but in Illinois, Indiana, and Missouri there were decreases in acreage.

Considerable fluctuation in the indicated acreages of Red May in the past were due in part to different grouping of synonyms. The name

FIGURE 43.—Nittany. 461,762 acres.

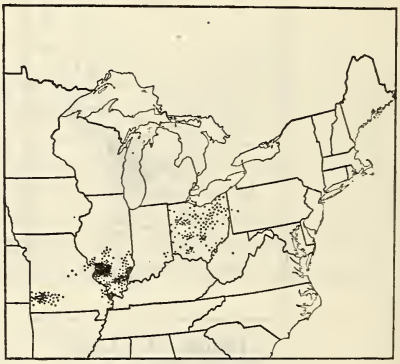

FIGURE 44.—Fulhio. 432,550 acres.

Red May is applied to an awnless, glabrous, brown-glumed variety in the Central States. In the Southern States the same name is used for an awnless, glabrous, white-glumed wheat synonymous with Flint. In the 1924 survey much of the Red May in the Southern States was reported as white-glumed and in compilation was shown as Rice. In 1929 only the white-glumed wheat reported as Red May was compiled as Rice, and all others were tabulated as Red May, thus causing a large increase in reported acreage. Continued study has shown that the Red May in the Southeastern States is synonymous with Flint, and in recent surveys it was so reported. The decrease in the acreage shown in 1944 probably can be considered as being due to a decreased interest in the variety, since the method of reporting has not been changed since 1934.

MEDITERRANEAN

The estimated 1944 acreage of Mediterranean was 331,228 acres, comprising 2.9 percent of the class total. The acreage of this variety has decreased rather gradually since the first report in 1919. The

distribution of Mediterranean in 1944 is shown in figure 46. At one time the variety ranked fourth among all wheats, but at the present time it is of minor importance. It was reported from 13 States, with the largest acreage in Texas. Considerable acreages of Mediterranean was reported from Illinois, and there were smaller quantities in Missouri, Kentucky, Tennessee, Arkansas, and Oklahoma. The acreage of this variety increased in Illinois, Arkansas, and Tennessee, while there was a decided decrease in Kansas, Missouri, and Oklahoma. Probably the greatest drop was in Kansas, where it has been replaced by Kawvale and Clarkan. The variety still shows a rather wide adaptation, as it was reported from New Jersey, Pennsylvania, and Virginia to Texas. Undoubtedly it will be replaced in Texas because of its susceptibility to rust.

CURRELL

Currell was estimated to have been grown on 329,804 acres in 1944, comprising 2.8 percent of the class total. The distribution of Currell wheat in 1944 is shown in figure 47. The variety was reported

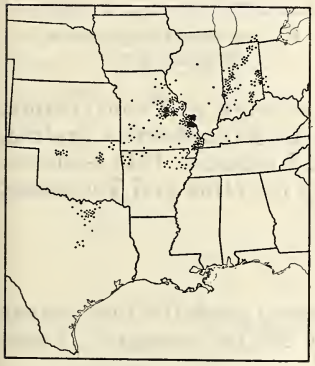

FIGURE 45.—Red May. 378,079 acres.

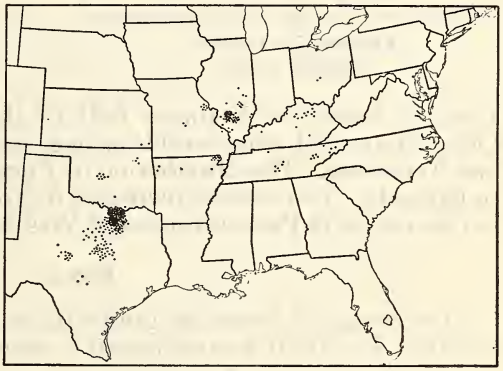

FIGURE 46.—Mediterranean. 331,228 acres.

from seven States, with the largest acreages in Kentucky, Missouri, Tennessee, and Oklahoma. The acreages of this variety increased in Kentucky and Tennessee, but decreased in Oklahoma, Missouri, Maryland, and Kansas. In Kentucky, Currell ranks second in importance. A selection of Currell, Kentucky R 47, recently has been distributed by the Kentucky Agricultural Experiment Station.

PURPLESTRAW

In 1944 Purplestraw was reported as being grown on 303,426 acres, which was approximately the same area as it occupied in 1939. In fact, the distribution of Purplestraw has not varied a great deal since the first survey was made in 1919. The 1944 distribution is shown in figure 48. The variety was reported from eight States, with the largest acreages in Georgia, South Carolina, and North Carolina, and somewhat smaller acreages in Virginia, Tennessee, and Alabama. Purple-

straw is a variety definitely confined to the southeastern section of the United States.

FORWARD

Forward was developed and distributed by the Cornell University Agricultural Experiment Station in 1920. It was first reported in the 1924 survey and increased rather gradually until 1939, but during the last 5 years has decreased in importance. In 1944 it was estimated to occupy 248,378 acres, or 2.1 percent of the class total, while in 1939 it occupied 2.7 percent of the class total. The variety was reported

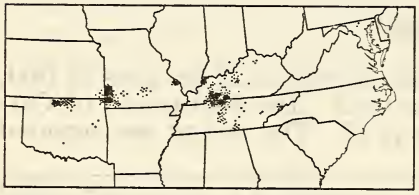

FIGURE 47.—Currell.
329,804 acres.

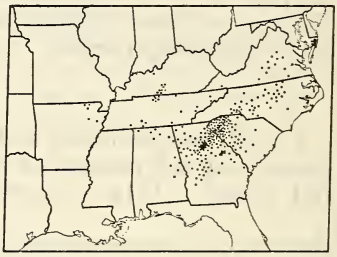

FIGURE 48.—Purplestraw.
303,426 acres.

from 11 States, with almost half of the acreage in Pennsylvania. Other States with considerable acreage were Virginia, North Carolina, and Tennessee. The distribution of Forward wheat in 1944 is shown in figure 49. The acreage increased in North Carolina and Tennessee, but decreased in Pennsylvania and Virginia.

POOLE

The acreage of Poole has gradually decreased since the first survey in 1919. In 1944 it was estimated to occupy 208,188 acres, or 1.8 per-

FIGURE 49.—Forward.
248,378 acres.

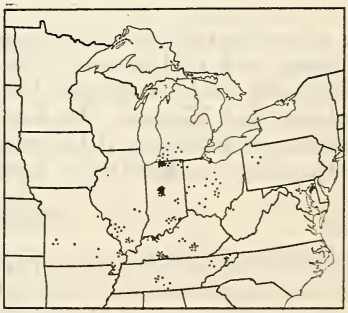

FIGURE 50.—Poole.
208,188 acres.

cent of the class total. In the earlier survey this variety was listed in the million-acre class, but its importance has decreased rather sharply. The distribution in 1944 is shown in figure 50. Poole was

reported from 12 States, with the largest acreages in Indiana and Kentucky. The variety is also of some importance in Ohio, Illinois, Michigan, Missouri, Maryland, and Tennessee. Slight increases were shown in Illinois, Kentucky, Maryland, and Michigan, but there were sizable decreases in Indiana, Missouri, and Ohio with smaller decreases in West Virginia, North Carolina, and Pennsylvania.

RUDY

Rudy is another variety with a relatively small acreage, but one that has remained quite constant throughout the years of the wheat surveys. In 1944 it was estimated to occupy 203,345 acres, or 1.8 percent of the class total. This is only slightly less than was reported in 1939. The variety was reported from six States with by far the greatest acreage in southern Indiana. It was also grown in Illinois, Pennsylvania, Ohio, Michigan, and Tennessee. The distribution of Rudy wheat in 1944 is shown in figure 51.

FLINT

Flint was estimated as being grown on 178,934 acres in 1944, an area comprising 1.5 percent of the total acreage of soft red winter wheat. The distribution is shown in figure 52. The variety was reported from nine States, all in the southeastern part of the United

FIGURE 51.—Rudy.
203,345 acres.

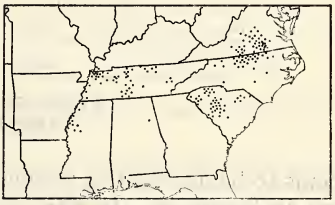

FIGURE 52.—Flint.
178,934 acres.

States. Tennessee, South Carolina, Virginia, and North Carolina have the largest acreages. In Virginia and Georgia there were decreases in acreage during the last 5-year period, but in other States there were increases, especially in Tennessee. In Mississippi, Flint is the leading variety, occupying over 40 percent of the wheat acreage of the State. Based on the total figure the variety slightly increased in importance since the last survey and now occupies as great a proportion of the class area as it did in 1934. During the six surveys, the reported acreage of Flint has fluctuated considerably, due in part to the grouping of synonyms, as explained in the discussion of Red May. No change in method has occurred since 1934, however, so changes should reflect fluctuations in actual acreage of the variety.

RED ROCK

Red Rock was estimated to have been grown on 163,212 acres in 1944, which was almost the same area as it occupied in 1939. In fact, the acreage of this wheat has fluctuated very little during the last three surveys. The distribution of Red Rock in 1944 is shown in figure 53. The largest acreage is in Michigan with some in Indiana. Smaller acreages were reported from Pennsylvania, Illinois, Virginia, and Oklahoma. The general trend of this variety is downward, although it did show a slight increase in Michigan where the wheat was developed. After more than 20 years Red Rock is still the most important soft red winter wheat grown in that State.

RED WAVE

Red Wave was estimated to have been grown on 121,278 acres in 1944, comprising 1.1 percent of the class total. This is another variety

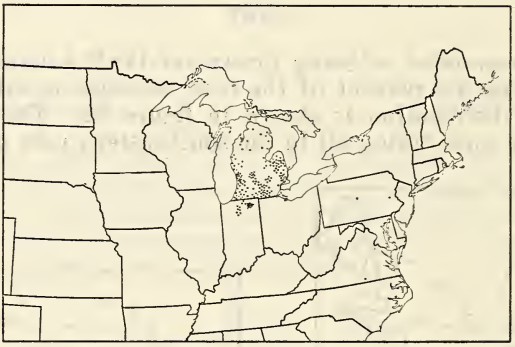

FIGURE 53.—Red Rock.
163,212 acres.

that seems to be decreasing rather gradually. Its distribution in 1944 is shown in figure 54. It was reported grown in 10 States, but in no case was it a leading variety. The largest acreage was in Missouri, with smaller acreages in Indiana, Illinois, Michigan, and Pennsylvania. In no State has there been an important increase in acreage.

V. P. I. 131

V. P. I. 131 was first reported in the 1929 survey and since that time has shown almost no fluctuation of the percentage of the class total. In 1944 it was estimated to have occupied 103,258 acres, or 0.9 percent of the class total. Practically all of the acreage of this variety is in western Virginia, with only small areas in Delaware, North Carolina, and Tennessee. In Virginia the acreage has remained fairly constant, and at the present time the variety ranks fourth in the State. The distribution of this variety is shown in figure 55.

OTHER VARIETIES OF SOFT RED WINTER WHEAT

In addition to the 21 varieties discussed, and for which maps are presented, 49 others were reported in 1944, as shown in table 10. Maps were made only for those varieties of soft red winter wheat that had an estimated acreage of 100,000 acres or more. In most cases the less important varieties are grown in the States where they were developed or in local areas, and most of them are decreasing. The acreages of Baldrock, Nigger, Goens, Triplet, Jones Fife, and Harvest Queen have shown gradual decreases, especially during the last 5 years. Five varieties, each grown on small acreages in 1939, were not reported in 1944.

Several new varieties have increased in acreage. Leapland and Wabash, first reported in 1939, have increased, while Early Premium decreased. Other varieties reported for the first time in 1944 include Nured in New York; Fairfield in Indiana; Sanford in Georgia; Austin

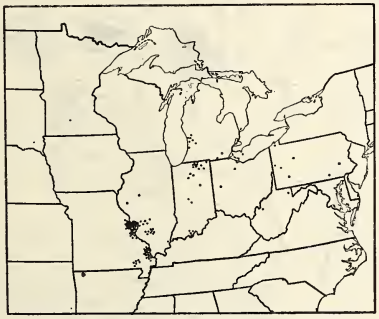

FIGURE 54.—Red Wave.
121,278 acres.

FIGURE 55.—V. P. I. 131.
103,258 acres.

in Texas; Carala from North Carolina; Hardired and Sanett in South Carolina; and Prairie in Illinois.

Of the 70 varieties listed in table 10, the old standard varieties Fultz, Fulcaster, Leap, and Purplestraw are still recommended for certain States, and the newer varieties Thorne, Clarkan, and Redhart have shown the largest gains.

WHITE VARIETIES

The estimated acreage of white varieties in 1944 was 5,092,525 acres, comprising 7.7 percent of all wheat in the United States. This is an increase of about 1 percent during the last 5 years, but the white wheats still rank fourth among the market classes so far as acreage is concerned. In 1924 and 1929 the durum wheats exceeded the white wheats in acreage, but in all other surveys the white wheats have been in the lead. The distribution of white wheat (both common and club) in 1944 is shown in figure 56. These wheats are grown in the Western States, especially Oregon, Washington, and Idaho, with smaller acreages in Michigan, New York, and South Dakota.

The varieties of white wheat are listed in table 11 in the order of their estimated acreage in 1944; the percentage of the total class acreage occupied by each variety by 5-year intervals since 1919 is also shown. The leading varieties in 1944 were Baart, Federation, Dawson, Yorkwin, and Rex in the order named. The first 3 varieties ranked in the same order in 1939, but Yorkwin moved ahead of Rex during the last 5 years. No white wheat occupies as much as a million acres, and only 12 varieties were estimated as being grown on more than 100,000 acres each.

The number of white wheat varieties reported as being grown commercially in 1919, 1924, 1929, 1934, 1939, and 1944 were 47, 46, 52, 62,

FIGURE 56.—White wheats.
5,092,525 acres.

65, and 55, respectively. Nineteen varieties reported in 1939 had no reported acreage in 1944. These were Hard Federation 31, Currawa, Eickmeyer, Erect, Hybrid 143, Union, Gypsum, Hood, Mackey, Bluechaff, Allen, Arco, Propo, Sonora 37, Martin, Canadian Red, Lynn, Flomar, and Powerclub. New varieties reported for the first time were White Federation 38, Baart 38, Cornell 595, Orfed, and White Fife. Several varieties not reported in 1939, but which were in earlier surveys, were again reported in 1944.

It is quite possible that in the case of such varieties as Baart 38 and White Federation 38 the reported acreage is too low, because in the schedules these wheats may not have always been differentiated from Baart and White Federation. This was caught and corrected in California.

TABLE 11.—*Percentage of the total white wheat acreage occupied by each variety of that class in the United States at 5-year intervals since 1919 and the estimated acreage for 1944*

[The asterisk (*) indicates the variety was reported as grown, but an estimate of acreage was not given or if given was less than 0.1 percent of the total acreage of the class]

Variety	Percentage of acreage						Acreage, 1944
	1919	1924	1929	1934	1939	1944	
Baart	10.0	16.9	17.1	19.8	21.6	16.5	831,098
Federation		1.1	16.8	17.4	14.4	13.8	694,254
Dawson	2.5	2.2	.9	8.9	9.2	9.2	460,897
Yorkwin					3.0	9.0	452,777
Rex					9.0	8.9	449,787
Goldcoin	19.1	23.4	19.9	10.9	6.5	8.6	434,320
Hymar					3.1	4.1	204,672
White Federation 38						4.0	197,840
Baart 38						3.3	166,557
Golden				(*)	.9	3.3	164,824
Lemhi					(*)	2.2	108,374
Hybrid 128	5.8	14.5	8.0	3.6	1.1	2.1	106,645
Dicklow	3.3	4.0	5.7	4.4	3.4	1.7	87,077
Alicel					.1	1.2	62,643
Wilhelmina			.5	.9	.9	1.1	57,003
Pacific Bluestem	27.4	13.0	8.1	4.2	3.1	1.0	52,859
Bunyip	(*)	1.0	2.6	1.8	2.3	1.0	49,103
Onas			.4	.7	.9	1.0	48,573
White Federation		(*)	.9	2.6	5.5	1.0	47,978
Florence		.4	2.9	3.0	3.5	.9	46,584
Idaed					(*)	.9	43,782
White Winter	1.1	1.0	.6	.4	.6	.6	32,612
Albit			1.7	9.8	3.1	.5	26,169
Big Club	.4	.7	.1	.9	.8	.5	24,248
Galgalos	.7	.5	.3	.3	.5	.4	18,085
Sonora	5.3	3.1	2.0	1.3	.6	.3	15,921
Pilcraw	(*)		.3	.6	.6	.3	15,227
Ramona				(*)	.2	.3	14,854
Jenkin	1.3	3.9	2.1	1.2	.4	.3	13,651
Greeson	.1	.4	.2	.4	.3	.3	13,296
Pacific Bluestem 37					(*)	.3	12,628
Oregon Zimmerman			.1	.4	.4	.2	12,466
Hard Federation		.4	1.4	.2	.2	.2	10,522
Honor		.2	.4	1.7	.9	.2	7,811
Poso				(*)	.6	.1	7,348
Silvercoin	(*)	(*)	.1	(*)		.1	7,215
Major				(*)	.1	.1	6,018
Club (varieties not reported)	7.7	5.7	2.8	.5	.4	.1	4,650
Requa					(*)	.1	4,424
Utac			(*)	(*)	.1	.1	4,291
Defiance	3.9	1.3	.9	.9	.3	.1	3,176
Little Club	2.1	.8	.4	.7		.1	2,945
Red Chaff	.8	.1	.2	.1	.1	(*)	2,259
Rink	.3	.7	.7	.2	.1	(*)	1,614
Kofod	.2	.2	.1	(*)		(*)	1,443
Cornell 595						(*)	1,126
Escondido			.1	.4	.4	(*)	1,107
Touse	.5	.3	.1	.1	(*)	(*)	1,073
Sevier	(*)	.1	.1	(*)	(*)	(*)	875
Orfed						(*)	618
Hybrid 63	.7	.4		.1	.1	(*)	341
Athena					(*)	(*)	316
White Fife						(*)	83
Surprise	1.2	.6	.5	.1	.1	(*)	71
Hard Federation 31				.1	.2		
Currawa				.2	.2		
Eickmeyer					.1		
Erect					.1		
Hybrid 143	1.0	.5	.2	.2	(*)		
Union					(*)		
Gypsum	.2	(*)		(*)	(*)		
Hood				(*)	(*)		
Mackey				.1	(*)		
Bluechaff	(*)	.1	(*)	(*)	(*)		
Allen	.3	.2	(*)	(*)	(*)		
Arco				.2	(*)		
Propo	.4	.3	.4	.1	(*)		
Sonora 37					(*)		
Martin	.8	.2	(*)	.1	(*)		
Canadian Red	(*)				(*)		

TABLE 11.—*Percentage of the total white wheat acreage occupied by each variety of that class in the United States at 5-year intervals since 1919 and the estimated acreage for 1944*—Continued

Variety	Percentage of acreage						Acreage, 1944
	1919	1924	1929	1934	1939	1944	
Lynn	0.2			0.1	(*)		
Flomar					(*)		
Powerclub		0.2	0.1	.1	(*)		
Varieties not reported in 1939 and 1944	2.7	1.6	.3	.3			
Total	100.0	100.0	100.0	100.0	100.0	100.0	5,036,130
Varieties not reported							56,395
Total							5,092,525

BAART

Baart was estimated to have been grown on 831,098 acres in 1944, comprising 16.5 percent of the class acreage and 1.27 percent of the total wheat acreage. This was a reduction of about 58,000 acres during the last 5 years, caused in part by the increase in Baart 38. The distribution of Baart wheat in 1944 is shown in figure 57. Baart was reported as being grown in 12 States in 1944, with by far the largest acreage in Washington. There were sizable acreages in Idaho, California, and Utah. It is the leading variety in Arizona and Washington and ranks second in Nevada. In Washington there was an increase of about 100,000 acres, but in California there was a decrease of about 170,000 acres. The center of the Baart acreage is in Adams and Lincoln Counties in Washington, but in all other States it is scattered rather widely.

FIGURE 57.—Baart.
831,098 acres.

FEDERATION

Federation, first reported in 1924, increased rather rapidly until 1934, but since that time it has gradually decreased. In 1944 the variety was estimated to occupy 694,254 acres, or 13.8 percent of the class total. The acreage was larger in 1944 than in 1939, and it made up 1.06 percent of the total wheat area. Federation was reported as being grown in seven States, with the largest acreages in Washington, Oregon, Idaho, and Utah. It is the leading variety in Nevada, ranks second in Idaho and Utah, and third in Washington and Oregon. The principal changes in acreage during the last 5 years were large decreases in Idaho and Oregon, while in Washington there was an increase of more than 250,000 acres. There was also a small

increase in Utah. The distribution of Federation wheat in 1944 is shown in figure 58.

DAWSON

Dawson (American Banner) is a white wheat grown only in the eastern part of the United States. It is the leading variety in Michigan and in 1944 was estimated to have been grown on 460,897 acres, or 9.3 percent of the class total. This represented a slight increase over the acreage reported for 1939. Most of the Dawson wheat is grown in Michigan, but smaller acreages were reported from New Jersey, Ohio, and Illinois. In Michigan the actual acreage increased, but owing to an increased wheat acreage in the State the percentage went down from 47.3 in 1939 to 46.3 in 1944. The distribution of Dawson wheat in 1944 is shown in figure 59.

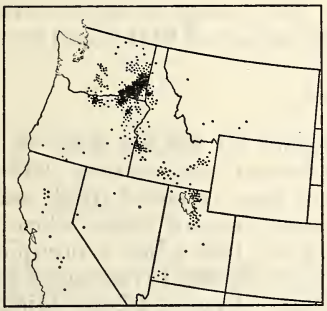

FIGURE 58.—Federation. 694,254 acres.

FIGURE 59.—Dawson. 460,897 acres.

YORKWIN

Yorkwin is a new variety of white winter wheat distributed from the Cornell station in New York in the fall of 1936. By 1939 it occupied 122,261 acres, or 3.0 percent of the class total, and in 1944 it had increased to 452,777 acres, or 9.0 percent of the class total. Most of the acreage is in western New York, but it is also grown in New Jersey, Pennsylvania, southeastern Michigan, and Kentucky. In New York the increase during the last 5 years has been about 200,000 acres, and it now occupies 86.7 percent of the wheat acreage in the State, compared with 43.7 percent in 1939. There was a large increase in Michigan, where Yorkwin ranks third and is grown on more than 100,000 acres, or 11.8 percent of the State's acreage. The distribution of Yorkwin in 1944 is shown in figure 60.

REX

Rex was developed at the Moro and Pendleton stations in Oregon and distributed in 1934. This variety was reported in the 1939 survey for the first time when it occupied 9.0 percent of the class total. In 1944 it was estimated to be grown on 449,787 acres, which was 8.9 percent of the class total. The distribution of the variety in 1944 is shown

in figure 61. Rex was reported from five States, Oregon, Washington, Idaho, Montana, and California, listed in the order of their respective areas. Acreage increases were noted in Oregon, Washington, and Idaho. It is the leading variety in Oregon, since it occupied 27.5 per-

FIGURE 60.—Yorkwin.
452,777 acres.

FIGURE 61.—Rex.
449,787 acres.

cent of the wheat area of the State. Its acreage is concentrated in southeastern Washington, the adjoining section of Idaho, and in north-central Oregon.

GOLDCOIN

Goldcoin was estimated as being grown on 434,320 acres in 1944, or 8.6 percent of the class total. This was an increase over 1939 when it occupied 267,501 acres. Goldcoin has been reported in all surveys, and in 1924 and 1929 was the most widely grown white wheat. Its acreage then decreased rather rapidly until 1939 when it occupied 6.5 percent of the class total. The variety was reported from eight States, the largest acreages being in Washington, Oregon, Idaho, Michigan, Ohio, and New York. The acreage has increased in Washington, Oregon, and Idaho, but has decreased in New York and Ohio. In the East it is being replaced by Yorkwin. The distribution of Goldcoin in 1944 is shown in figure 62.

HYMAR

Hymar, a variety of white winter club wheat, was distributed in Washington in 1935. It was reported in the 1939 survey as being grown on 126,919 acres, or 3.1 percent of the class total. It increased considerably and in 1944 occupied 204,672 acres, or 4.1 percent of the class total. The 1944 distribution is shown in figure 63. The largest acreage was reported from eastern Washington, with smaller quantities in northern Oregon and western Idaho. Increases were shown in

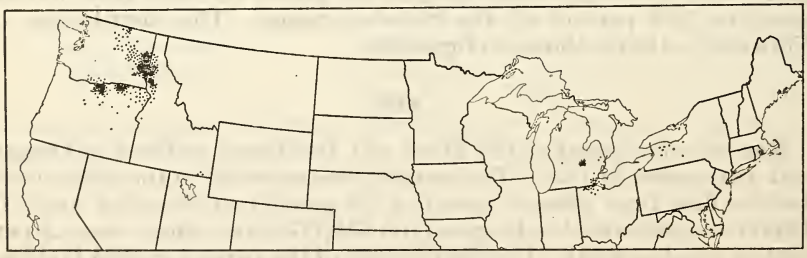

FIGURE 62.—Goldcoin.
434,320 acres.

all of the States, with the largest ones in Oregon and Washington. It is still the most widely grown club wheat, having replaced much of the Albit acreage.

WHITE FEDERATION 38

White Federation 38 was developed at the California Agricultural Experiment Station and distributed in 1939. It is the result of a backcrossing program designed to produce a bunt- and stem-rust-resistant White Federation. In 1944 the variety was estimated to occupy 197,840 acres, or 4.0 percent of the class total. All of this acreage was in

FIGURE 63.—Hymar. 204,672 acres.

FIGURE 64.—White Federation 38. 197,840 acres.

FIGURE 65.—Baart 38. 166,557 acres.

California where it is the leading variety of wheat and is well distributed throughout the wheat areas of the State. The distribution of White Federation 38 in 1944 is shown in figure 64.

BAART 38

Baart 38 is very similar to Baart except that it is resistant to stem rust and to some races of bunt. It is the result of a backcrossing program carried out at the California Agricultural Experiment Station, and the variety was distributed in 1939. It was estimated to occupy 166,557 acres, or 3.3 percent of the class total in 1944. Practically all of this acreage is scattered in California, with a small amount in Arizona. Due to the similarity of names it may be that some of the acreage of Baart may actually be Baart 38. The distribution of Baart 38 in 1944 is shown in figure 65.

GOLDEN

Golden, a selection of Goldcoin, was distributed in Oregon in 1930, and in Idaho in 1931. It was reported in the 1934 survey and since then has been increasing gradually. In 1944 it was estimated to occupy 164,824 acres, or 3.3 percent of the class total. The variety was reported in Washington, Oregon, and Idaho. Its acreage was mostly in southeastern Washington, with a smaller area in Oregon. The distribution of Golden in 1944 is shown in figure 66.

LEMHI

In the 1939 survey Lemhi was estimated to have occupied 185 acres in Idaho, and since then it has increased until in 1944 it was grown on 108,374 acres, mostly in Idaho. Lemhi was grown on 10.2 percent of the wheat area of that State and ranked third for acreage. Small areas were reported from Utah, Nevada, and Oregon. The distribution of Lemhi in 1944 is shown in figure 67. This variety was released to growers in the irrigated districts of southern Idaho in the spring of 1939 by the Aberdeen (Idaho) substation. The rapid expansion of the acreage indicates that it has been popular with the growers in Idaho.

FIGURE 66.—Golden. 164,824 acres.

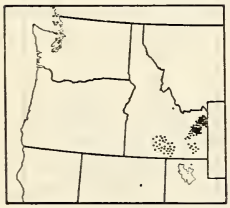

FIGURE 67.—Lemhi. 108,374 acres.

HYBRID 128

Hybrid 128, a club wheat, was estimated to occupy 106,645 acres, comprising 2.1 percent of the class total in 1944. The acreages of this variety are located in Washington, Oregon, and Idaho, with the States ranking in the order named. The distribution of the variety in 1944 is shown in figure 68.

OTHER VARIETIES OF WHITE WHEAT

In addition to the 12 varieties of white wheat discussed above, which are grown on 100,000 acres or more, there are many others of minor importance. Many of these are gradually decreasing in acreage, while some are new and have not yet become widely grown. Nineteen varieties grown on small acreages in 1939 were not reported in 1944. From the standpoint of varietal standardization this is most encouraging.

TABLE 12.—*Percentage of the total acreage of club wheat occupied by each variety of that class in the United States at 5-year intervals since 1919, and the estimated acreage for 1944*

[The asterisk (*) indicates the variety was reported as grown, but an estimate of the acreage was not given or if given was less than 0.1 percent of the total acreage of the class]

Variety	Percentage of acreage						Acreage, 1944
	1919	1924	1929	1934	1939	1944	
Hymar					30.9	43.9	204,672
Hybrid 128	23.7	49.8	49.2	20.5	11.3	22.9	106,645
Alicel					.6	13.4	62,643
Albit			10.8	56.4	30.6	5.6	26,169
Big Club	2.0	2.4	.6	5.3	8.3	5.2	24,248
Jenkin	6.1	13.4	12.7	6.9	3.9	2.9	13,651
Poso				.2	5.6	1.6	7,348
Hybrid 123	2.6	6.2	3.6	.4	1.1	1.4	6,431
Club (varieties not reported)	44.2	19.5	17.5	3.0	4.2	1.0	4,650
Utac			.1	.1	1.0	.9	4,291
Little Club	9.7	2.6	2.4	4.0		.6	2,945
Redchaff	3.6	.3	1.1	.6	.9	.5	2,259
Hybrid 63	3.0	1.3		.8	.7	.1	341
Hybrid 143	4.5	1.5	1.4	.9	.3		
Union					.2		
Hood				.3	.2		
Bluechaff		.2	.1	.1	.2		
Varieties not reported in 1939 and 1944	.6	2.8	.5	.5			
Total	100.0	100.0	100.0	100.0	100.0	100.0	466,293

Of the 55 varieties of white wheat listed in table 11 and reported grown in 1944, the old standard varieties Baart and Federation continue as important wheats and are recommended for certain sections. Of the newer varieties, Yorkwin, Rex, Hymar, White Federation 38, Baart 38, Golden, Lemhi, Alicel, and Onas have made the greatest gains during the last 5 years.

CLUB VARIETIES

All club varieties with white kernels are listed with the white wheats in table 11, and those with red kernels are listed with the soft red winter wheats in table 10. This is in agreement with the market classes and subclasses. It seems desirable, however, to consider the club wheats as a group, and in table 12 all such varieties are listed, regardless of kernel color. In 1944, 12 named varieties of club wheat were reported. A considerable acreage of unnamed varieties was listed in the table as "Club (varieties not reported)" because many of the correspondents regard "club" as a varietal name.

FIGURE 68.—Hybrid 128. 106,645 acres.

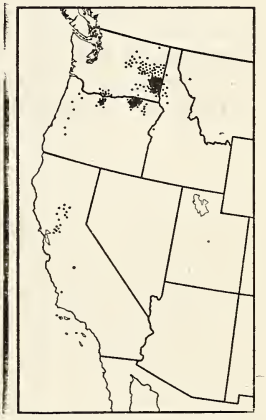

FIGURE 69.—Club wheats. 466,293 acres.

The total estimated acreage of club wheats in 1944 was 466,293 acres, or 0.71 percent of the total wheat acreage. This type of wheat is raised chiefly in Washington, Oregon, Idaho, and California, with small acreages in Montana and Utah. The distribution in 1944 is shown in figure 69. The real production centers are Whitman County, Wash., and Umatilla County, Oreg. In 1944 Hymar was the leading variety of club wheat, being grown on 43.9 percent of the acreage. It was also the leading variety in 1939, but at that time Albit was almost as important. At present Albit is grown on a greatly reduced acreage. Hybrid 128 ranked second in acreage with 106,645 acres compared with 204,672 acres for Hymar. Alicel increased during the last 5 years and ranks third with 62,643 acres. All of the other varieties were grown on less than 30,000 acres.

The acreage of the red club varieties is decreasing; in fact, only one, Hybrid 123, was reported in 1944, and it occupied only 6,431 acres.

EXPERIMENT STATION PRODUCTIONS

The 1944 wheat varietal survey shows that 216 recognized varieties were grown commercially in the United States on about 65½ million acres. Of these varieties, 110 were produced by breeding or selection at State or Federal agricultural experiment stations. Most of them were produced in experiments cooperative between both agencies. These 110 varieties were grown on nearly 33 million acres, or slightly more than half the acreage.

The remaining varieties, grown on nearly half the area, were developed by private breeders or are introductions from other countries. Many of the latter were bred at foreign experiment stations, particularly in Canada and Australia. Some of these foreign wheats were introduced by the United States Department of Agriculture and distributed by State or Federal stations. Private breeders in the United States have developed 44 of the varieties, which were grown on about 16½ million acres or slightly more than 25 percent of the total acreage.

STANDARDIZATION OF VARIETIES

The varieties of wheat most widely grown usually are those best adapted. However, new varieties are continually being developed by Federal, State, and private breeders. The United States Department of Agriculture and the State agricultural experiment stations test new varieties in comparison with the old, and thus are in a position to recommend the best variety or varieties for each locality and State. The agricultural extension services, using the information developed by Federal and State experiment stations, advise growers as to the best variety for any particular locality. From the data presented it would seem that more consideration should be given to eliminating the poorer varieties and to the distribution of new ones, since the newly improved varieties are not replacing old varieties so rapidly nor so completely as seems desirable.

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